The Bowman Lecture

ON THE

PARASITICAL DISEASES OF THE EYE.

Delivered at a Meeting of the Ophthalmological Society,

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MR. PRESIDENT AND GENTLEMEN,—The invitation which I received last year from the Council of your Ophthalmological Society was, I must say, a very welcome one. I value very highly the great honour which this invitation brings with it, the more so as this lecture has been instituted with the design of gratefully commemorating the services which Sir William Bowman has rendered to science. I am fully conscious of the honour of being allowed to speak in commemoration of a man so greatly esteemed all over the Continent, and especially in my own country, because of his pre-eminent scientific position. But, having in the first moment cheerfully and decidedly consented to accept the honour conferred upon me, I afterwards felt the whole weight of my responsibility, and began to fear that I should not be able to discharge the duties which I had undertaken. It is a well-known fact that in treating of difficult matters it is not always easy to find the right words and the proper expressions, speaking even in the mother tongue; and I venture to speak before you in a language, not quite different from the German in its earliest origin, to be sure, but very different in its later development. I beg to apologise for all incorrectness of speech and deficiency of elegance; indeed, I feel sure you will overlook them.

The aim of my lecture will be to lay before you an account of the parasitical diseases of the eye—diseases very little known in earlier times, but now more and more occupying the attention of the scientific world.

The late Dr. Mackenzie, in his "Practical Treatise of the Diseases of the Eye," had only one short chapter treating of the entozoa of the organ of vision. At the present day, in consequence of the investigations of modern science, this chapter ought to be greatly enlarged. The entozoa of the human eye, mentioned in the fourth edition of that treatise, which was at that time the most valuable and the most complete work on ophthalmology, are almost all visible with the naked eye—namely, (1) filaria, (2) monostoma and distoma oculi humani, (3) echinococcus hominis, and (4) cysticercus cellulosæ. Let us see what is known at the present time of these species of entozoa.

Von Nordmann may be looked upon as the first observer of the natural history of minute living creatures in the eye. He examined an immense number of eyes of fishes, amphibians, birds, and mammals, and found therein several specimens of different entozoa. Examining the human eye, he and Gescheidt and von Ammon found in its crystalline lens also several parasites. In the extracted lenses of an old man von Nordmann found two specimens of a filiform worm, and a similar one in the cataractous lenses of an old woman. As it was impossible to give an accurate description, he named it filaria oculi humani. In another lens of an old woman he found eight specimens of monostoma, which showed some slight motion after being put in lukewarm water. Gescheidt and von Ammon also found in the cataractous lens of an old man three extraordinarily slender worms, which they closely described and judged to be the same filaria seen by von Nordmann. In a child of five months, which died of atrophia meseraica, they found between the opaque crystalline lens and its capsule four specimens of distoma oculi humani, of which they gave a detailed description. It is to be presumed that this distoma might have been an incompletely developed specimen of distoma hepatis (Leuckart). Von Nordmann as well as Gescheidt were, in the branch of helminthology, very eminent investigators and strictly truthful in their accounts. There can be no doubt that what they saw in the human eye and what they described was really that which they deemed it to be. But it is most astonishing that ever since neither monostoma nor distoma has been found in cataractous lenses, though the microscopes of to-day are much more powerful than those of fifty years ago, and though a very great number of cataractous lenses have been very closely examined.

These observations belong, therefore, to what I may call a traditionary period of the history of parasitical diseases. Nearly the same may be said of the filaria in the human crystalline lens; whereas filaria in other parts of the eye, especially under the conjunctiva, according to Guyot, is a very common disease among the negroes of Congo. This worm seems to live only in the west of Africa, in Guinea, on which account it has the name Guinea worm; but a certain number of zoologists do not think it to be quite the same as the filaria medinensis. It has, therefore, been called filaria loa, the word loa being the name of the worm in the language of the inhabitants of Congo. It is, as far as I know, only observed in the eyes of negroes;[1] and it is said that no case has been recorded in America since slavery has been abolished.[2]

Echinococcus in any part of the human body is, except in Iceland, a very rare disease. Mackenzie refers to two cases of echinococcus in the orbit, but there have been published about forty. Echinococcus has never been found in other parts of the eye except in the orbit. It causes, to be sure, more or less protrusion of the eyeball; but it does not impair the sight in any other way, and may be easily removed by operation.

Cysticercus.—Mackenzie quotes only the few cases of cysticercus cellulosæ known at the time of the edition of his book. The fourth and last edition was published in the year 1854, a few years after the discovery of the ophthalmoscope in the year 1851, and I might have said "the invention of the ophthalmoscope," but Helmholtz himself has repeatedly said that it was much more a discovery than an invention, and so I cannot but use the same expression. The discovery of the ophthalmoscope signalises the beginning of quite a new period of our special science. The internal diseases of the eye were up to that time, we may say, quite unknown. The ophthalmoscope enlightened the darkness in which internal diseases of the eye were hidden, and, respecting the entozoa of the eye, showed that the cysticercus cellulosæ does not only reside under the conjunctiva, or in the anterior chamber, or in any other part visible with the naked eye, but even in the retina and in the vitreous body, where it cannot be seen otherwise than with the aid of the ophthalmoscope; in fact, it chooses its domicile more often in these parts than anywhere else in the organ of vision.

It is very remarkable that the cysticercus has been seen at Berlin, and in some other places in the north of Germany, in a much larger proportion of cases than elsewhere. Von Graefe of Berlin was the first to observe a cysticercus with the ophthalmoscope in the internal parts of the eye, and was the first to extract it by an operation. He had already seen a considerable number of cysticerci before the first was seen at Vienna in the autumn of 1865. This curious fact is difficult to explain. At first one could deem it probable that the use of the instrument was better understood at Berlin than at Vienna, because it was in use at Berlin almost six months or more before it was known at Vienna. But its practice was very quickly acquired, and I need not say that Eduard Jaeger of Vienna was one of the most accurate observers with this instrument, and was the first to publish pictures of the fundus oculi of an admirable and unsurpassed exactness. It is necessary to look for another explanation. Since the experimental investigations of Küchenmeister and Leuckart, it has been well known that there are two different species of tapeworm residing in the digestive tube of the human body—the one with a crown of hooks round its head, the other without it. The first stage of these tapeworms, the cysticercus, exists likewise in two different forms—the one with hooks, the other without them. These crowned tapeworms in their first stage—the cysticercus—live especially in pigs, sometimes in an exceedingly great number, and in some other animals, and also in the human body. The cysticercus without hooks lives in the body of cattle, but never in the body of pigs. This fact has been sufficiently proved by feeding experiments. It is worth notifying that this cysticercus without hooks, living

[1] Leuckart: Die Parasiten des Menschen und die von ihnen herrührenden Krankheiten, 2 Aufe, Bd. ii., p. 620. Leipzig, 1886.

[2] Blanchard: La Filaire sous Conjunctive. Le Progrès Méd., No. 20, 1886, p. 611.

in cattle, has never been found in the human body, neither in the eye nor elsewhere. It seems to be nearly certain that pork is consumed to a much larger extent in the northern than in the southern countries, and that the tapeworm with hooks is much more common in the north than in the south; the consequences of this will be that the cysticercus (with hooks) must also be much more frequent in northern than in southern countries.

But the more one studies this question the more one finds that both tapeworms, the tænia solium and the tænia mediocanellata, exists in a nearly equal proportion everywhere, and therefore the before-mentioned question is far from being satisfactorily answered. Let me quote only a few figures to prove what I have just said.

The late A. von Graefe of Berlin found one cysticercus, visible with the ophthalmoscope, in the internal parts of the eye among about 1000 patients; his cousin, Alfred Graefe of Halle, found them in about the same proportion; whereas Dr. Berlin of Stuttgart found one cysticercus among 40,000 patients; Dr. Hansen-Grut of Copenhagen, only one cysticercus among 70,000 patients; Dr. von Wecker of Paris, only one cysticercus among 60,000 patients; and Dr. Mauthner of Vienna, not one among 30,000 patients. The first and only intraocular cysticercus in Belgium was seen last year (1885). This is, indeed, a very remarkable disproportion, well worthy of being more closely investigated. Another equally remarkable fact is, that cysticercus in the internal eye is not nearly so rare as in any other part of the eye. The late A. von Graefe of Berlin only once saw a cysticercus in the crystalline lens (this being the only time that one has ever observed it in this structure), once in the orbit, three times in the anterior chamber, five times under the conjunctiva, in contradistinction to more than eighty times in the retina and in the vitreous body. Similar observations have been made by Alfred Graefe, the professor in Halle, who in his large practice sees four or five cases of intraocular cysticercus annually, and he saw only one in the anterior chamber during a period of eight years.

The brief history of cysticercus in the human body is this: Eggs of the tapeworm enter in one or other way into the human stomach. The thin covering of these eggs is dissolved by digestive action, and the living little cysticercus appears. To be sure, it has not yet been really observed, but it hardly seems possible that there could be any other means for it to reach the eye than that this minute animal passes through the wall of a bloodvessel, entering thus into the circulatory system. Carried along with the blood it may be stopped somewhere—for instance, in the choroid,—and then it creeps out, like a white blood corpuscle in a case of inflammation. Its behaviour in this place is different. It seems that the worm has a tendency to get into the vitreous body, and this action is performed with more or less impetuosity. If seated in the choroid, or under the retina, the moving of the worm gives rise to a large detachment of the retina, and sometimes one has observed that it really creeps through the retina into the vitreous. This process cannot be performed without causing the patient great discomfort. It often excites a vehement inflammation with unsupportable pain, and produces dense opacities in the vitreous, so that the minute animal can hardly be distinguished with the ophthalmoscope. If seated in the retina the little worm does not do so much harm, and generally gets more easily into the vitreous, without exciting such disagreeable sensations. Then, the vitreous remaining clear, it can be perfectly well seen with the ophthalmoscope. In a few cases one could distinctly see the crown of hooks and the movements of the animal. According to the difference in the behaviour of intraocular cysticerci, different modes of treatment are required. If the cysticercus is very unsteady and rambling, it will be necessary to perform enucleation of the eyeball directly; if it behaves quietly, and if the patient does not suffer much pain, it may be allowed to remain for a time. But, so far as we know of this very rare disease, periods of quietness and periods of restlessness are constantly alternating; and, finally, the eyeball shrinks, and sight will almost always be entirely lost. That is the reason why some operators do not think it advisable to wait at all, but to perform the operation in any case in which the presence of a cysticercus is well established. This being so, it will be the best plan to operate as early as possible when there are no inflammatory symptoms.

Instead of enucleation, one has successfully tried to extract the little animal from the eyeball. This was first performed, as I have already mentioned, by A. von Graefe. He first made a large iridectomy, and afterwards extracted the worm with cannula forceps through a scleral wound made about two lines behind the corneo-sclera' margin. Many other oculists have since that time successfully, as well as unsuccessfully, tried to do the same by more or less similar operations. What has been done in this way by Alfred Graefe of Halle is of much interest. No oculist has performed an equally large number of operations for cysticercus. In his last publication[3] on this subject he refers to forty-five eyes afflicted with intraocular cysticercus, operated upon by him in the eight years 1877–1885. The immediate result of these forty-five operations was completely satisfactory. In thirty cases the parasite was caught and extracted, in only one of which an unusually profuse loss of vitreous followed. In fifteen unsuccessful operations, the want of success in extracting the worm was due to dense opacities of the vitreous not allowing an exact determination of its seat, or to an unsteadiness of movement, the animal being in the middle of the vitreous and floating about in all directions. The best chance for a successful extraction is when the worm is steadily seated between the retina and choroid. Twenty-four out of the successful cases Albrecht von Graefe had the opportunity of seeing again some time afterwards. In almost all these twenty-four patients, pain and other inflammatory symptoms had entirely subsided, and the eyeball had preserved its natural form, though in some cases it was weaker than normal. The sight of the patients had increased, and in one or two of them to a considerable degree. In the fifteen cases in which it was impossible to dislodge the animal, it afterwards appeared necessary to remove the whole eyeball or the anterior part of it, an operation which is obliged to be performed when pain and other inflammatory symptoms arise. These are the results of forty-five operations performed by Professor Alfred Graefe of Halle. Few of our special *confrères* have had the opportunity of performing this operation, and only a very small number of these have performed it more than once.

From the rarity of a cysticercus residing in the interior of the eye, this disease is, in a practical sense, of no great importance, but scientifically it is highly interesting. The course of life of any living parasite in the living human body cannot be studied with less trouble and with greater exactness than that of a cysticercus living in the eye. These are almost all the parasites of the organ of vision visible with the naked eye. But there is another series of microscopical parasites, belonging to the vegetable kingdom, practically of much greater importance. Of these we have now to treat.

These micro-organisms are the lowest forms of life we know, but by no means the most indifferent for our bodily welfare. They are such small objects that it is impossible to see them unless we use the strongest magnifying power of microscopes of the very best construction, but by their enormous multitude and power of propagation they can nevertheless do us very great harm. Pasteur has demonstrated that the air owes its property of decomposing organic substances to minute particles suspended in it, which are the germs of various low forms of life, long since revealed by the microscope, but not previously shown to be the essential cause of putrescence and decomposition of organic substances. This fact was primarily only a theoretical one, but Sir Joseph Lister was the practical man who succeeded in making the knowledge of this useful for the benefit of mankind, in giving the impulse to scientific studies, which originated thoroughly new ideas of diseases and of the means of curing them. You know better than I possibly can tell you the great merits of Sir Joseph Lister with respect to his antiseptic method; I wish only to mention that he, bearing in mind that all the mischief in healing wounds arises from the vitality of these atmospheric particles, and directing his attention especially to the subject of suppuration, found carbolic acid well adapted for the treatment of open wounds. Some years passed away before the profession began to trust in these new ideas, and I remember perfectly well the first trial made with a great deal of incredulity at Rostock, and the general astonishment in observing what a remarkable retardation of suppuration was the result of this treatment. Ophthalmology, always attentively looking round for some possible advancement, did not wait very long in applying the principles of this

[3] Albrecht von Graefe's Archiv für Ophthalmologie, Bd. xxxi., Abth. 4, p. 33. Berlin, 1885.

treatment to eye diseases, especially to the after-treatment of cataract extraction. The members of this Society who were present at the International Congress held in London in the year 1881 will well remember the communication on the antiseptic method in ocular surgery made by Professor Horner of Zurich, in which communication he said that loss of eyes following a perfectly normally performed extraction of cataract had long been known, and that an exact analysis of all the cases of primary suppuration after cataract extraction leaves no doubt that it depends on infection. The most complete analysis of the results of cataract extraction shows a loss of 10·1 per cent. by the flap operation, and a loss of 4·8 per cent. by the linear operation, which loss has been reduced at Zurich to 1·5 per cent. by strictly observing the measures of antiseptic treatment. This is a wonderful practical result of what is rightly called Lister's antiseptic method.

But Lister's method was not only fruitful in a mere practical sense; it has greatly contributed to thorough investigation of all those living germs which occasionally invade the human body; it gave rise to the question, What are these living germs? The profession in all parts of the world has earnestly tried, and is still trying on a large scale, to give an answer to this question. This research has originated quite a new science, called bacteriology. Bacteriology has already determined a great number of different species of these micro-organisms, and has described their forms, their food, their manner of living, &c.; but it is impossible (and in the meantime useless) to give here an exhaustive account of the systematical differences of these microzoa, and of the multitude of names given to them. Some of them, there is no doubt, are very dangerous to health; some are, perhaps, innocent; and some (why should it not be so?) may be of a salutary influence. For our purpose it will be sufficient to divide them into only two classes, the pathogenic and the non-pathogenic microzoa. For this distinction we can only refer to experiments made on animals. If there is an effect produced by any microzoon on the eye of an animal, then it may be argued that a similar effect may be expected upon the human eye. Rabbits are the most docile and the most patient of animals, and therefore are mostly used for such experiments. Hence any microzoon will generally be called "pathogenic" which leads to infection in the rabbit's eye, and will be called "non-pathogenic" if in the rabbit's eye it does no harm, so that what results in the rabbit's eye will show us what is to be expected in the human eye under similar circumstances. But here we are on uncertain ground. These conclusions evidently are correct only on the assumption that the tissues of the rabbit's eye and the tissues of the human eye are absolutely identical. This, to be sure, is not the case. There are some microzoa very dangerous to rabbits and relatively innocuous to the human body, whilst others are dangerous to human health and relatively innocuous to rabbits. Gonococcus and staphylococcus aureus, for instance, the most dreaded of all microzoa because of their great tendency to provoke suppuration, are in the rabbit's eye relatively indifferent micro-organisms. The conjunctiva of the rabbit and the conjunctiva of the human eye are therefore not equally good abodes for certain microzoa. It is the same with other animals; each one has its own idiosyncrasies for nourishing and for starving micro-organisms. But not only is the difference of the same tissue in different animals the reason of a different behaviour of the same microzoon; the tissue itself in one and the same individual may change under different conditions of life, and may consequently not be identical during the whole lifetime. It is quite possible that changes may take place during life, unknown perhaps to ourselves, but very important to the respective micro-organisms. I will only allude to vaccination, which evidently changes the nutrient soil so that the microzoa of small-pox can no longer live in it; they no longer find nourishment, and the vaccinated body remains unaltered by an infection which would have been fatal to it if unvaccinated. These views introduced concerning small-pox by Dr. Jenner are now about to be generalised for nearly all infectious diseases. It may be ascertained, as a matter of observation, that certain micro-organisms cannot live in an animal when certain others have already taken possession of its body, whereas they may be pernicious to it when certain others are not present.[4] But it has not yet been ascertained whether they change the nutrient soil into a sterile one, or whether they devour or kill each other.

There is one other remark to be made—that is, that the quantity of microzoa invading the human body is also of great importance. Just as poison has its poisonous property only with respect to the quantity, and can be a wholesome remedy when taken in right proportions, although deadly when taken in too large a dose, so a small quantity of pathogenic microzoa, assaulting the human body, may be innocent, whereas the danger increases with the increasing quantity.

If it is true that not every nutrient soil is equally well adapted to every microzoon, one microzoon developing better in one soil than in another, it must consequently be true that one or other nutrient soil is exceedingly well adapted to a certain species of micro-organism. Supposing this to be a fact, some authors have formed the idea that an exceptionally well-nourished and well-developed microzoon might show some difference from the same microzoon when badly nourished, and might, for instance, grow larger and thicker, or even change somewhat its original feature, or change its character in so far as its pathogenic activity might be lessened as well as strengthened. This idea is, to a certain extent, analogous to what daily experience teaches with respect to plants and animals. Plants put in a favourable soil may grow excessively well, and may, to a certain extent, change their colour, smell, and other qualities, but, put in a bad and unfavourable soil, they will fade and die.

Concerning the microzoa this may be the same, but it has not yet been sufficiently proved by facts. We will now briefly consider some of the microzoa which produce diseases of the eye.

The Normal Conjunctiva.—The surface of the normal conjunctiva is covered with a fluid, which is composed of pure water secreted by the lacrymal gland, and of some fat and slime secreted by the minor glands of the conjunctiva. The germs of all living microzoa floating in the air can every moment drop into the open eye and remain on the surface of the conjunctiva. Hence it cannot be astonishing that one finds in every normal eye plenty of germs of all possible kinds of micro-organisms. Of two persons with quite normal conjunctivæ it has been found that almost always one eye contains pathogenic germs.[5] Why does not the eye, then, become inflamed every moment? Conjunctivitis is, as you know, a very common disease. That it is not much more common than it really is, and that it does not arise every moment, may partly be explicable by the passing of these germs through the lacrymal canals into the nose, where they probably may be innocuous; partly by the qualities of the conjunctival tissue itself, it being, in some people, a bad soil for nourishing and feeding germs, in others a good one. The most common of all forms of conjunctivitis is the phlyctenular, called by the authors of a more remote period conjunctivitis scrofulosa. This is a form arising chiefly in children, and only exceptionally in adults. The research in finding a particular microzoon in these phlyctenules has not yet been successful—it would require very delicate manipulation; but in the fluid which moistens the conjunctiva there have been found seven or more different forms of microzoa, partly pathogenic, partly non-pathogenic. The authors of a more remote period, who preferred the adjective "scrofulosa," thought this disease to be a blood disease, which occasionally comes out and subsides. There has never been the least doubt in the mind of any practitioner that this disease is nearly always combined with some other symptoms of scrofula, that it arises chiefly in scrofulous children, and that in these children it often becomes so dangerous that the eye is lost. We are far from exactly knowing the connexion which exists between scrofula and phlyctenular conjunctivitis; but it may be that these infectious germs find an easier and better nourishment in an unhealthy conjunctiva than in the conjunctiva of a quite healthy child, the unhealthy conjunctiva being uneven and perhaps better fitted for sheltering micro-organisms. The same argument will explain the frequent recurrences of scrofulous or strumous ophthalmia. As to the treatment of this disease, powdering the eye with calomel is nearly universally adopted as the best remedy, and its use quite harmonises with the bacteriological theory. Calomel, not soluble in distilled water, turns soluble by the addition of some salt. Tears containing a small quantity of salt, the powder of calomel brought into the eye will be, and is chemically proved to be, dissolved into small quantities, and changed into chloride of mercury, this being an excellent

[4] Emmerich: Tageblatt d. 59. Versammlung deutscher Naturforscher und Aerzte, 18 bis., Sept. 24th, 1886, p. 145.

[5] Gifford: Archiv für Augenheilk., Bd. xvi., p. 197.

antiseptic solution. A weak solution of chloride of mercury was formerly a frequently used collyrium for the same eye disease. It is now almost entirely displaced by the subchloride of mercury or calomelas, perhaps because *in statu nascendi* the chloride of mercury may have a still better effect than a weak solution of it has.

Conjunctival Blennorrhœa, or Purulent Ophthalmia.—Another very dangerous parasitical disease of the conjunctiva is blennorrhœa. The micro-organisms residing in the gonorrhœal matter, first discovered by Neisier, and named by him "gonococcus," is identical with the micro-organisms found in purulent ophthalmia. The etiology of blennorrhœa in new-born children is well known, and the discovery of the gonococcus in both diseases further supports their mutual relation. Nitrate of silver is an excellent antiseptic, and it has long ago proved, in various ways, to be well adapted for curing blennorrhœa, or, tospeak in modern terms, it is well adapted for killing the gonococcus. It is not only suitable for curing blennorrhœa, but even for preventing it—that is to say, for killing the gonococcus before it has damaged the eye. For preventing this disease, Credé of Leipzig gave the advice to drop one minim of a 2 per cent. solution of nitrate of silver into the eyes of every new-born child. With this preventive treatment he succeeded in reducing the high percentage of 12 per cent. and more of ophthalmia neonatorum in his lying-in hospital to $\frac{1}{2}$ per cent., and even to less than that. I am not sure if it will be advisable to adopt this treatment as a general rule, but its adoption in lying-in hospitals will very likely save a very great number of eyes, especially in those hospitals in which cleanliness is an unknown thing. At the meeting of the Imperial Surgical Society of Paris, on February 21st, 1866, M. Giraldès[9] reported that in the Hôpital des Enfants Trouvés the loss of eyes (sometimes even of life) by blennorrhœa neonatorum reached the enormous number of 80 to 90 per cent.; to-day we are not very far from reducing the number of eyes lost by this pernicious disease of new-born children to zero. This, within twenty years, is really a respectable progress of science.

Trachoma.—That trachoma is caused by micro-organisms seems to be a well-established fact, though all authors are not of the same opinion on this point. The microzoon, described under the name of diplococcus of trachoma, is, as regards its form and configuration, very like the aforesaid gonococcus, only it is much smaller. It represents a very small ball, cleft by a tiny line, which line can only be seen by the most powerful microscopes. This diplococcus can very well be cultivated in different nutrient soils, whereas gonococcus, can only be cultivated in serum of blood; in other nutrient soils it does not grow. The diplococcus of trachoma has its seat inside the trachoma follicles, but outside the cells; whereas gonococcus lives in the cells or at the outside of the conjunctiva—at least, does not enter deeply into this membrane. Diplococcus of trachoma cannot be successfully inoculated into the conjunctiva of rabbits; but it is said that it has more than once been successfully inoculated into the human conjunctiva. Gonococcus, one of the most dangerous microzoa of the eye, is very easily transferable to the mucous membranes of any animal. As to the treatment of trachoma, a variety of drugs has been successively recommended, but sulphate of copper is the one that is most generally in use. In comparison with nitrate of silver it may perhaps be preferable, because it is less energetic and does not act so superficially. Its action certainly proceeds deeper into the tissue, and may therefore be better adapted to reach the diplococcus, which is seated, not on the surface, but in the follicles of the conjunctiva. The method of squeezing, or cutting, or scratching out the follicles has practically proved useful, and is, bacteriologically, quite correct.

Saccus Lacrymalis.—The lacrymal sac is like a reservoir for the fluid secreted by the conjunctiva. This fluid, always more or less loaded with micro-organisms, is stopped by the least impediment on its way to the nose, the sac being thus stuffed with microzoa. Fortunately, they may not be altogether pathogenic; but some of them, or a great part of them, being pathogenic, it will be a very dangerous group in the neighbourhood of the eye. When the sac is filled up, the outlet to the nose being closed, the fluid may occasionally regurgitate into the conjunctiva, and can greatly endanger its safety, being innocuous only when it contains non-pathogenic organisms alone. The presence of a stricture in the lacrymal duct, and a filling up of the lacrymal sac with matter, have long since been considered a dangerous complication. Practically, it will always be advisable to pay great attention to this complication, the relative quantity of pathogenic and non-pathogenic microzoa being changeable. The least wound of the cornea, the least loss of its epithelium, as well as any operation, opens an entrance into the deeper layers of the cornea, and allows of the immigration of micro-organisms. The result of this, the microzoa being pathogenic, will be a grave suppuration.

There exists a form of keratitis, called ulcus serpens and keratitis-hypopyon, whose dangerous course, well known to the profession, can hardly be explained except by infection.

Keratitis Mycotica.—The first time we met with the term "keratitis mycotica," which means inflammation of the cornea, caussd by micro-organism, was in the year 1875. At the ninth meeting of the Ophthalmic Society, Professor Horner of Zurich demonstrated the cornea of a patient who died in consequence of a facial erysipelas, having suffered in the last days of his life from a large ulceration in the lower part of the cornea. The microscopical sections of this cornea seen with the naked eye showed a great number of fine straight lines running out from the ulcer in a centrifugal direction; seen under the microscope, this network of straight lines proved to be dilated lymph canals of the cornea filled with numerous minute spherical bodies, all of about the same size. The members of the Society who were present were persuaded that this case was really of a mycotic character, and that the spherules seen in the cornea were specimens of the coccus of erysipelas.

There are still other diseases of the eye probably depending on parasitical infection. Microzoa have been found in a chalazion; they have been seen in the internal parts of the eye—in the iris, in the choroid, in the ciliary body, in the optic nerve; local and general tuberculosis have been successfully produced by inoculating the bacilli of tubercle into the anterior chamber of a rabbit's eye; it has even been tried to prove that sympathetic inflammation is produced by the wandering of micro-organisms along the optic nerve and through the chiasma to the other eye; but all this is not yet sufficiently explained, and much laborious and long-continued work is still required. Bacteriology is at the present time a very young and incompletely developed science; it cannot yet answer all the numerous questions arising every day.

The result of all this long-continued work may be that some day the etiology of human diseases and bacteriology will be found to be nearly identical sciences. Everywhere one finds micro- and macro-zoa persecuting, vexing, and killing each other; everywhere one finds parasitism; and, in the material sense of the word, the human race itself is nothing less than a parasite on the surface of the earth. For saving his own life, for nourishing his own body, the human being destroys and kills every creature—plants as well as animals—if he deems it proper for his own welfare. And he is allowed so to do by the words of the Holy Bible. This state of things in the material world corresponds exactly to what your great philosopher Hobbes calls a "bellum omnium contra omnes." But in a moral and intellectual sphere this sentence is out of place, and has to be altered into "pax omnium inter omnes," for in the moral and intellectual sphere there exists no personal interest, no parasitism; the single person being an integral member of the great body of mankind, who has, as such, to seek for knowledge of the works of our Creator, and consequently to admire and to love Him.

[9] L'Union Méd., No. 8, 23, et 26, 1866.

GUILD OF ST. LUKE.—A service in connexion with this Guild will be held in St. Thomas's Hospital chapel on the 7th inst., at 5.30 P.M. This is the first of a series of services which the Council is anxious to organise for the purpose of putting forward amongst medical men and medical students the objects of the Guild and its medical missionary work. The sermon will be preached by the Bishop of Lincoln, and no tickets are required for admission.

THE SMALL-POX EPIDEMIC AT JAMAICA.—Despatches were received at Plymouth on the 28th ult. to the effect that the small-pox epidemic at Kingston, Jamaica, is greatly on the increase. The authorities are now adopting stringent measures to check the disease, and infected houses are placarded with yellow bills notifying the fact. The disease has been stamped out in Colon, which is reported to be very healthy.

A Clinical Lecture

ON THE

PATHOLOGY AND TREATMENT OF CHRONIC CONSTIPATION IN CHILDHOOD, AND ITS SEQUEL, ATONY AND DILATATION OF THE COLON.

Delivered at the Hospital for Sick Children, Great Ormond-street,

BY W. B. CHEADLE, M.D., F.R.C.P.,

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GENTLEMEN,—There is, I imagine, no disordered condition of the body which is so frequently the subject of medical treatment as constipation. Not only are doctors called upon to prescribe for it daily, but every chemist's shop does a brisk trade in aperients; and the public use largely the hundred quack pills in vogue, and dose themselves with these and domestic remedies approved by household tradition. And usually, if there is no mechanical obstruction to the intestinal canal, nothing is easier than to force a free passage through it by calomel and colocynth, or castor oil, or jalap, or croton oil. If one purgative will not do it, another will; or an enema will wash out the *cloaca maxima*—the colon. But this is not the whole question. The exhibition of purges is a very limited portion of the management and cure of constipation. The temporary relief of the bowels is a small matter. If the constipation is only a chance and exceptional difficulty, a free purge may end the trouble and cure the complaint, and this is indeed the usual event; but if the constipation is recurrent, chronic, or habitual and obstinate, it is necessary to go deeper in order to effect a cure—to alter the conditions which give rise to the torpidity of the bowels. The temporary relief afforded by a brisk purge, moreover, if frequently repeated, tends to defeat its own end. The purgatives lose their power after a time. Stronger and stronger drugs have to be used, the position becomes more and more difficult, and the last state of the patient is apt to become worse than the first.

Now the permanent cure of constipation is of great importance to health and to the comfort of life. It may seem a small thing, but even with adults habitual constipation and the necessity for constant resort to drugs are always sources of trouble, of worry, of disordered function in other organs, of chronic fæcal poisoning, of pain and discomfort, sometimes of grave anxiety, and even of fatal complications—e.g., obstruction, ulceration and perforation from pressure of hard fæces. In children the question is in certain aspects more serious still, for it affects not only present health and comfort, but future development and the working conditions of the alimentary canal for the whole of after-life. There is this difference, further, between the two cases. Injudicious treatment may render constipation confirmed in the case of the adult. In the case of the child it may do this also, but it may do far more, as I shall show presently. It may, and often does, cause such serious injury to the bowel itself that it recovers only after long and careful management, even if the damage inflicted be not permanent and incurable. As a general proposition, it may be said, perhaps, that adults suffer most from the consequences of neglect of constipation, children from the too vigorous and mischievous treatment of it. The treatment of constipation in childhood, then, is a subject of considerable importance. To be successful it must comprise something more scientific and comprehensive than the mere administration of aperients. It is not enough to open the canal when blocked, or sweep it clear of accumulations which have lodged there. The essential point is to establish such a habit of daily evacuation that accumulation of the noxious waste and its evil consequences may not recur—to modify the condition permanently. In order to do this the causes which give rise to it must be thoroughly understood—must be removed, or neutralised, or compensated.

There are many different factors concerned in the production of constipation, which act in varying degree in different cases. 1. Deficient fluid in the intestinal canal, caused by deficient supply in food, excessive waste, or deficient secretion from the intestinal mucous membrane. 2. Deficient peristalsis, especially of the large intestine, from defects of diet, or from atony due to over-stimulation by purgatives or to degeneration of the muscular coat. 3. Inhibitory influences of the nerve centres of the brain and cord, probably affecting both peristalsis and secretion of fluid. 4. Deficient bodily exercise and movement. 5. Dilatation of the intestine, especially the colon, due to debility of the intestinal wall or to actual dilatation by accumulated fæces, gaseous distension, repeated enemata, or laxness of the abdominal wall.

Such are the chief causes which give rise to constipation. They are not all met with in the case of children, however—at least not in equal degree. Thus, weakening of the muscular fibre of the intestine by the deterioration of age, mental depression, deficient bodily exercise, or astringent food rarely can be credited with the production of deficient peristalsis in early life. Putting aside malformation, such as atresia more or less complete, peritonitis, intussusception, and the like, the causes which are chiefly operative in childhood are:—1. Food which leaves little residue; very completely digestible food—e.g., milk: fæcal matter too small to duly excite peristalsis. This is a common cause in very young children, and in like manner a too great uniformity of food fails to excite peristalsis. 2. Deficiency of liquid in food, not enough to drink, is another not infrequent cause in children: causing too dry fæces. 3. Deficient biliary secretion, "acholia": unstimulating fæces. 4. Deficient secretion of glands of mucous tract: dry fæces. 5. Over-stimulation and consequent atony of intestine: loss of excitability and loss of power, caused—(*a*) by coarse foods, (*b*) by frequent purgatives, (*c*) by too frequent use of enemata. To these may be added the dread of evacuation from pain caused by hard stools. The latter is frequently operative in children. Instead of aiding the evacuation of the bowels, the child resists it with all its might. This resistance to the passage of fæces, partly voluntary and partly reflex, is caused by the pain of extrusion through the sphincter of a hard rough mass, or the existence of a fissure or sore of the anus. When once constipation has occurred this is an important cause of its continuance, to be overcome only by inducing absolute liquidity of stools for a time.

Now, the symptoms produced by retention of fæcal waste in the intestine vary remarkably. In some cases, especially in very young milk-fed children (and the fresher and better the cow's milk the more constipating is it—i.e., non-fermenting, not acid), there may be absolutely no derangement of general health. The child eats well, sleeps, is hearty and robust—the picture of health. There appears to be no fæcal poisoning by reabsorption of foul matter from the intestine. The chief difficulty is the pain caused by the passage of the hardened dry fæces. This causes the child to resist all attempts to go to stool. It screams and cries, and dreads the action, and thus, refusing to assist by its own efforts, the bowels remain closed for days perhaps, until a good dose of castor oil or other domestic medicine compels evacuation. In addition to this there may be restlessness and night terrors; but the tongue is usually clean, and digestion and nutrition good. Let me give a few examples of this simplest form.

CASE 1.—H. P—— came to me in December, 1880. He was a plump, rosy, sturdy boy of one year and nine months old. Nothing could have been more perfect than his development and nutrition. His limbs were straight, his body well formed, and his flesh hard as wood. He was brought for advice with regard to constipation, from which he had suffered since he was three months old. He was restless and fidgety, had disturbed sleep, waking up crying or screaming. He had been brought up largely on cow's milk. The stools were light, hard, and dry. All kinds of medicine had been given from time to time—castor oil, rhubarb, senna, jalap, scammony; with stimulating articles of diet—porridge, prunes, fruit. Sometimes the bowels did not act for three or four days together. After a time the bowels were never opened without medicine, stronger and stronger doses

being required. For the last two or three weeks medicines had been found to produce so little effect that enemata had been resorted to. The child dreaded the action of the bowels, and could not be induced to try to relieve them. He screamed and struggled violently if made to attempt it. He screamed when the motions passed. He dreaded the enemata too. Sometimes these were retained and did not act. The abdomen was full and distended, but no fæcal accumulation could be felt, nor was the colon obviously dilated. The case was one of constipation, due in the first instance to the digestible ingesta leaving a small residue, and thus exciting imperfect peristalsis; partly also to defective intestinal secretions, made worse by stimulating purgatives, and aggravated still further by frequent enemata. As the bowels had not acted for four days, it was necessary to relieve them at once. For this purpose I gave a grain and a half of calomel and four grains of compound jalap powder. But the essence of the treatment consisted in securing daily action by means of some unstimulating aperient. The plan adopted was this: a solution of carbonate of magnesia (two drachms to the ounce) was ordered, and one, two, or three teaspoonfuls, or more, as might be necessary, in milk, once or twice a day every day until the bowels became relaxed. The result was satisfactory. The bowels began to act regularly; the treatment was continued for three or four months. Then the medicine was omitted altogether, and after a time a relapse came. A mixture of strychnine, iron, and sulphate of magnesia was then given as the child grew older, and it became steadily better, and ceased to attend. Thus by simple means, without the use of any strong purgative, except a dose of calomel and jalap at first, and a single dose of calomel (three grains) afterwards, a satisfactory cure was effected in a most obstinate case of long standing, where previous treatment had failed. Of such cases I could quote any number, but I will give only one more.

CASE 2.—Mrs. T. S——'s baby, a fine healthy child of six months, brought up on cow's milk. The food agreed perfectly, but constipation had been obstinate from birth. This was treated at first by occasional doses of castor oil. Then enemata were resorted to. They became required more and more frequently, and larger and larger ones given, until the parents, becoming alarmed, brought the child to me. There was no malformation; there were no symptoms except screaming from passing hard dry fæces. Think of this poor little baby of six months old having its intestine steadily dilated by enemata daily. A solution of carbonate of magnesia (ten grains to the ounce) was ordered, as many teaspoonfuls to be given as necessary to render the bowels relaxed. This was accomplished in six days. The medicine was gradually reduced, and the constipation did not return. Six months later the child remained well.

In other cases, again, there is some disorder of health, slight, but significant and persistent, and due no doubt to chronic fæcal poisoning—such as general cachexia, a sallow complexion, somewhat coated tongue, foul breath, loss of appetite, languor, general torpidity and sleepiness, with disturbed nights, dreaming and restless, and in young children moaning and night terrors; of this the following are examples.

CASE 3.—C. J——, aged thirteen, an anæmic girl of delicate appearance, came to me in August 1885, suffering from constipation of the most obstinate kind. The bowels had not been open for ten days. The trouble commenced nearly four months previously, after an attack of mumps. The bowels did not act for three or four days at that time. Castor oil was given, which produced free evacuation. The bowels, however, did not act again for the next five days, when a doctor was consulted, who prescribed more purgative medicine. This ceased to have effect, although various aperients were tried. Then galvanism and regular enemata were given, with varying and temporary benefit. Other medical men were consulted. Various remedies were given, with stronger purgatives. She had been taking jalap chiefly. But for some days no action whatever had followed. The medical man under whose care she was stoutly declared that the girl was imposing upon the credulity of those round her, and that the bowels really had acted, but that she had concealed it. The girl was delicate, slightly made, and rather pallid. Her tongue was fairly clean, but she was extremely languid and had no appetite; this had been so ever since the mumps. She was quiet and sensible, and the governess who accompanied her had observed nothing suggestive of hysteria. The catamenia were established, and had appeared regularly for the last twelve months. On examination the abdomen seemed normal in most respects, but a soft doughy mass could be felt in the left iliac region—clearly accumulated fæces. This was an instance in which the tonicity of the intestine had been lowered by the debilitating influence of mumps, causing deficient peristaltic action. The condition had been increased by the free and long-continued use of stimulating purgatives and enemata. An ounce of castor oil was ordered immediately, to be followed by an oil enema if necessary; after that a mixture of strychnia (three minims) and belladonna (quarter of a grain), with the sulphates of magnesia and soda, twice a day after food. The oil acted freely next day. The mixture produced an action every two or three days. The sulphates of soda and magnesia were persistently increased until the bowels acted freely—until, indeed, an opposite condition of slight diarrhœa was established. Then the amount of medicine was slowly reduced. In a week or two the patient was able to give up medicine altogether. Her health returned, appetite came back as the regular action of the bowels was re-established, and a visit to Brighton confirmed the cure. I saw this girl only a few days ago. She has remained absolutely well.

In this instance the affection of health was only slight. In the next I shall relate the cachexia induced was more marked, and disappeared in like manner with the removal of constipation.

CASE 4.—M. L——, aged ten, a small delicate boy, came to me in April, 1883, suffering from frequent attacks of nausea, giddiness, headache, loss of appetite, and languor. He was a quick boy, fond of school, but unable to work there often on account of headache. Physical examination showed nothing wrong, except that he was lean, sallow, and cachectic-looking. The abdomen was not distended. The heart and lung sounds were normal. There was no albumen in the urine. The tongue was a little coated. The only previous illness of importance was an attack of diphtheria; but this was not severe, and there had been no sequelæ. The bowels were always confined, being open only every other or every third day. The stools were hard and dry. The constipation was habitual; it had existed more or less for years. It had been relieved by occasional purges and frequent enemata. The boy was an only son of French parents, indulged by too luxurious living, taking meals with his parents, and partaking of rich dishes and pastry, of which he was inordinately fond.

This was a case in which there was defective peristalsis, not traceable to any definite cause. Possibly the diphtheria may have been one factor by lowering the tone of the intestinal muscle, although it could not be certainly traced to this cause; or the condition may have arisen in simple neglect to empty the bowel daily, and it had been aggravated no doubt by the use of strong purgatives and frequent enemata. The cachectic state and failure of appetite, too, had been increased by injudicious feeding, and this, again, had reacted in increasing constipation by inducing malnutrition and debility of muscle of bowel. The headache was a striking feature in this case. It must be referred, I think, to fæcal absorption. The great majority of so-called nervous headaches in children are of this kind. Even in neurotic children constipation is constantly a chief factor in their production. A mixture of sulphate of iron, magnesia, and soda, with liquor strychniæ, were given twice a day after food. The diet was most strictly regulated, and fresh fruit made an important item of food. The saline aperients were increased until a free daily action was secured, and in three weeks all headache and nausea had passed away, appetite returned, and the child was well, except for a little restlessness and grinding of the teeth at night. It was thought that this might be due to the presence of a worm, and a dose of santonine and calomel was given, with the result of bringing away a single round worm. This removed the last signs of disorder. The laxative was gradually diminished, and ultimately left off altogether at the end of two months. The boy continued well until the following December—i.e., six months later, when the constipation returned, and with it the old symptoms of languor, loss of appetite, and headache. A pill of aloes, nux vomica, sulphate of iron, and extract of henbane was now ordered twice a day after food. The bowels acted again, and the child got well without further trouble. There has been no return.

(To be concluded.)

ON THE MYDRIATIC PROPERTIES OF HYDROBROMATE OF HYOSCINE.

BY JOHN TWEEDY, F.R.C.S.ENG.,
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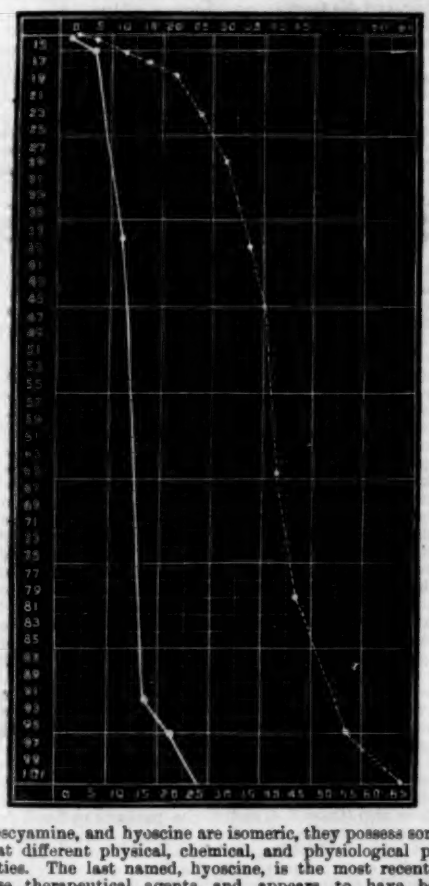
THE researches of Ladenburg have shown that three different mydriatic bodies are contained in the atropaceous alkaloids—namely, pure atropine in belladonna and stramonium; pure hyoscyamine (crystalline) in belladonna stramonium, hyoscyamus, and duboisia; and lastly, hyoscine, which is associated with hyoscyamine, in hyoscyamus. Pure duboisine is identical with pure hyoscyamine. The relationship which scopoline, another atropaceous mydriatic obtained from Scopolia japonica, bears, chemically and physiologically, to those just mentioned, has not, I believe, up to the present been precisely determined. Though atropine,



hyoscyamine, and hyoscine are isomeric, they possess somewhat different physical, chemical, and physiological properties. The last named, hyoscine, is the most recent of these therapeutical agents, and appears to have been little used in England. In America, on the other hand, it has been extensively employed, chiefly on the recommendation of the very elaborate experimental and clinical investigations of Professor H. C. Wood of Philadelphia. In the current (November) number of *The Practitioner*, Dr. Mitchell Bruce has called attention to the remarkable efficacy of hyoscine in controlling "those conditions of cerebral excitement variously known as delirium, mania, and insomnia, with restlessness." The prompt and satisfactory results which Dr. Mitchell Bruce had obtained suggested a special trial of hyoscine as a mydriatic.

In commerce there are three crystalline salts of hyoscine: the hydriodate, the hydrobromate, and the hydrochlorate. The first occurs in large prismatic orange-coloured crystals, which are not freely soluble in water; the hydrobromate in small crystals, which are readily soluble in water. Partly on this account, and partly because the hydriodate might contain free iodine, the hydrobromate seemed better suited to ophthalmic purposes. The experiments whose results are here recorded were made with a solution of the latter salt of the strength of 1 in 200, prepared by Mr. Martindale of New Cavendish-street. The solution proved to be a rapid, powerful, and unirritating dilator of the pupil alike in the healthy and in the inflamed iris, and a paralyser of the accommodation. Notwithstanding its great activity when given internally or subcutaneously, I have not yet met with an instance of its producing toxic effects such as occasionally follow the use of duboisine, though this contingency may be possible with stronger solutions. Having tested the general mydriatic action of the drug in healthy and in diseased states of the eye, I asked Mr. E. T. Collins, senior house-surgeon at the Moorfields Ophthalmic Hospital, to undertake some comparative observations with a solution of atropine of corresponding strength. The results of his observations are shown in the annexed diagram. The horizontal rows of figures indicate the time of action in minutes, the vertical column the position of the nearest point of distinct vision (*pp*) in centimetres. The effect of the hyoscine is represented by the continuous line; that of atropine by the broken line.

Before applying the solutions, the "nearest point" was ascertained to be at 15 centimetres in both eyes. Hyoscine was applied to the right eye, and atropine to the left. Hyoscine removed the nearest point to 38 centimetres in ten minutes, whereas it took the atropine thirty-five minutes to do this. In twenty-five minutes the accommodation was completely paralysed by hyoscine, the nearest point having receded to 100 centimetres; whereas with atropine this was not attained for sixty-five minutes. Similarly, the pupil was fully dilated by hyoscine in fifteen minutes, while it required twenty-five minutes to produce an equal effect. (See diagram.) Further, the effects of hyoscine also last longer than those of atropine, and are not so easily counteracted by eserine.

The indication seems to be that, if hyoscine is to have a place in ophthalmic therapeutics, it will be chiefly in cases of iritis and in other conditions where it is desirable to produce as much dilatation of the pupil as possible and for as long a time as possible. It is worthy of note that the application of hyoscine to the eye does not seem to cause the unpleasant taste and feeling in the throat which often follows the use of atropine. This circumstance accords with the observations of Dr. Bruce and others, that when given internally it does not produce unpleasant dryness of the throat and skin like atropine.

Harley-street, W.

SOME CASES OF LOCAL NUMBNESS OF THE EXTREMITIES,

WITH COMPARISONS BETWEEN LOCAL SYNCOPE AND "NIGHT PALSY."

BY J. EDWARD SQUIRE, M.D. LOND., M.R.C.P.,
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CASE 1.—E. G——, aged eighteen, tailor, came under my care in March, 1884, complaining of numbness or deadness of the fingers and of giddiness. He is a tall, broad-built, well-developed lad, with thick lips, fair complexion, and light wavy hair. The numbness of his hands is not constant, but occurs about once every day, generally about midday. It appears to be induced by washing in cold water when the hands are already cold. Although he washes his hands in cold water when he gets up, this does not make them "go off," as, having just got out of bed, they are then warm." At several of his visits I had the opportunity of seeing his hands in the condition for the relief of which he applied, and the following was their appearance on one occasion: "The middle finger of the right hand is quite white to the centre joint; the rest of the hand, with the

other fingers, is dark blue, the whole feeling intensely cold to the touch. A needle-prick in the white finger is not felt, and there is no bleeding; in the blue part of the hand the prick is felt. He can move the hand and fingers, but has no feeling in the white part and tingling in the rest. Pulse 60, and fairly strong at the wrist. Soon the blue colour in the back of the hand becomes mottled with bright red (vermilion); this marks the commencement of the return of the hand to its natural condition. The red points enlarge and coalesce, and soon the whole hand is a good colour again, and warmer." During the return to warmth the hands perspire and tingle and feel burning hot. Both hands "go off" in this manner; usually all the fingers are affected, and also the thumbs to a smaller extent. The fingers, when I first saw the patient, never became absolutely white and bloodless above the middle joint. The wrists and all the rest of the body are warm during the attacks. The numbness lasts usually from five to fifteen minutes, and his arms seem weaker for a time after an attack. Between the attacks both the hands and axillæ perspire very freely. The attacks only occur in cold weather. There is no history of nervous diseases in the family, and the personal history of the patient is very good; he states that he has hardly had a day's illness that he can remember. He is the eldest of seven, his parents having been married probably two or three years before his birth. His teeth are notched. When at school he used to have urticaria, but never has that now; and three years ago he had attacks of "fainting brought on by cold air." He thus describes these attacks: first he felt cold on the brow, everything seemed red and then black, and then he lost consciousness and fell. Physical examination: The chest is long, with acute costal angle. The breath-sounds are weak, and the heart-sounds are plainly heard over the right side. The upper border of the cardiac dulness is in the fourth space, and the apex beat is low, being two inches below the nipple and an inch and a half to the inside. The beat is natural and distinct, not by any means heaving, and the sounds are clear and without murmurs. There is no *bruit de diable* in the neck. Spleen not enlarged, and no signs of inter-thoracic tumour. There is no *tache cérébrale*. Temperature 97·6°. Urine very pale (sometimes dark-coloured), free from albumen or sugar; boiling with Fehling's copper solution gives a reddish discolouration with a flocculent precipitate on standing, but no reduction of copper. Under treatment, in which iron was prominent, his condition improved, and on May 7th I made the following note: "He can now generally keep the hands from 'going off' by beating them across the chest, like a cabman, as soon as they begin to get numb; his thimble seems to press on the finger and to start it off on the body side of the rim. The fingers perspire much when he is out walking." The weather continued cold, and it was not till the beginning of June that he was free from the attacks of numbness for the summer. About the beginning of September he had an attack on the weather changing from very hot to chilly. Early in October the middle and ring fingers of the right hand "blistered" during the night. They were bad a week, and when at the worst the fingers were numb. Also on a cold day, when the wrists became numb, an old scratch on the right wrist broke out again, and was bad some days. By October 24th, although the weather was much colder, he reported that his hands were almost always in a glow, and that he felt much better. The fingers kept well, in spite of very cold weather, till November 14th, when the middle finger of the right hand became numb round the old wound after washing. On Dec. 29th, the patient reported that twice during the week he had had an attack of giddiness and partial insensibility. His hands did not "go off," but his feet did. On Jan. 14th his hands became quite numb from the finger-tips to the metacarpo-phalangeal joints. Shortly after this I lost sight of him.

CASE 2.—J. F——, aged sixty-five, tall, thin, and of nervous temperament. Suffers from neuralgic pain, and lately vertigo. Is dyspeptic, with a red fissured tongue. Urine sometimes deposits uric acid. No articular swellings. Knee-jerk well marked. Pulse always slow, mostly below 60. Bowels easily acted upon. Sleep fairly good, but easily disturbed. In June last, while dressing one morning he was alarmed with sudden loss of feeling and power of movement in the index, ring, and middle fingers of the left hand. He rubbed, pinched, and moved them about, but they were, as he said, "as dead as a doornail." Soon they were slightly numb, and then all right again.

CASE 3.—H. M——, aged thirty-four, a clerk, height 5ft., weight 6st. 4lb. Weak and neurotic; feels giddy while dressing; the limbs tremble; he fears to move lest he should fall. He has a numbness in some parts of his legs and feet; this sensation soon goes. He often wakes with numbness of one hand, mostly the left; this will sometimes come on in the morning, so that he has to pause in his work, fearing also lest he should put the wrong letters into envelopes. No weakness of the right hand in writing. He has defective teeth, phosphatic urine, and often has hay-fever in the summer; has no headache; sometimes hæmorrhage from piles.

CASE 4.—Miss E. B——, aged thirty-two, tall, dark, and pale. Suffers occasionally with neuralgic pain and pulsating noise in the left ear. She has an anæmic bruit, and her teeth are defective. Menstrual period regular, but painful, and for one or two days only. At the end of October, during an attack of neuralgic pain of the left intercostals and in the right arm, one day the right middle finger suddenly became numb and useless, so that she could not hold a plate or feel it distinctly. During the winter she had faceache on the right side and pain down the right arm, which aches while writing, and she fears it may become useless. She suffers much from close desk-work in the summer, and from neuralgia, and wakes up in the early morning with numbness of the right hand and arm, which makes her fear writer's cramp. She has to have the hand rubbed before attempting to get up. This ceased when the health improved, after the removal of some bad teeth on the right side, and on obtaining rest from work and change of air; and she has since continued her duties at the desk without any failure, but has at times temporary fulness of the tonsil, migraine, or facial neuralgia, with photophobia.

CASE 5.—Miss E. S——, aged fifty, stout, florid, and robust. Menopause after typhoid fever three years since. Some flushing of face and fatigue in walking. Good appetite and regular bowels. Suddenly roused in the night by "deadness" of one thumb. This caused alarm, and the thumb was bitten severely "to bring it to." The bite left a mark, but was not felt at the time. This recurred so as to negative the idea of its being the result of pressure on the arm during sleep.

CASE 6.—M. C——, milliner, single, aged forty-nine, tall and dark, neurotic, but otherwise strong and robust. Troubled with constipation. Menopause last year; before that always dysmenorrhœa. Pain in left side and shoulders most days; sometimes it extends down the arm. At times the fingers of both hands become dead half-way up, so that she is obliged to stop work. Sleeps badly, and sometimes is awakened by numb pain in the left arm or in both hands. Before the deadness and the numbness occur she often notices that the fingers look blue. She is conscious also of a numbness round the lips at times, both by day and in the night; and is sometimes told that she has turned blue in the face when this sensation occurs. The heart is healthy. She has seen the lips sometimes pale with this dark look round them; they then look and feel withered, and she has to rub them before they return to their natural sense and colour. She often wakes up in the night with both hands going dead along their ulnar aspects up to the wrist, or half way up the left arm.

Remarks.—All the above cases have a common symptom—viz., temporary numbness of the upper extremity—occurring in most of them paroxysmally. Cases 1 and 2 are examples of local syncope or dead fingers, one severe, the other slight; both occurring in men. In the remaining cases, the occurrence of this numbness at night justifies their classification under what has lately been described as "night palsy." In three of these also (Cases 3, 4, and 6) the patients suffered from paroxysmal attacks of "dead fingers" during the day. Slight cases of "dead fingers" are not uncommon. In these, generally on exposure to cold, the finger tips become white and numb, regaining warmth and feeling after a variable time, the return to the natural condition being accompanied by tingling similar to that of chilblains. Such cases, however, rarely attain sufficient importance to cause the person to seek advice for that alone, as was done by the boy whose case I have detailed (Case 1). These cases of "dead fingers" are most commonly found amongst hysterical and emotional women. In one lately under my care the finger tips became numb every morning, and feeling did not return for about two hours. The condition is evidently due to spasm of the arterioles, the cause of this spasm being more difficult to determine. The chief interest in such cases comes from

their relation to some more obscure nervous affections and to those more severe conditions in which the spasm of the arterioles is more lasting, if less complete, so that the continuance of bloodlessness leads to impairment of vitality in the part, or to absolute local death. Such cases are known as "Raynaud's disease," the most severe showing symmetrical gangrene. M. Raynaud, in his thesis,[1] from which much of our knowledge of these conditions was derived, uses the term "local syncope" to describe the temporary bloodlessness and loss of sensation seen in such cases as the one detailed. The condition, in which there is partial stasis, but with sufficient passage of venous blood to prevent complete loss of warmth, he calls "local asphyxia." It is with this latter condition that his name is usually associated, though the essential character of both is the same. In some remarks on a case contributed by him to the Clinical Society, Dr. Barlow says, "The essential clinical note of Raynaud's disease, at all events primarily, is the paroxysmal character of the circulatory disturbance." That will apply equally to local syncope and to local asphyxia. One recorded case of Raynaud's disease was attended with paroxysmal hæmaturia, and in several the urine was dark-coloured or contained blood. In some there has been spasm in the arterioles of the retina, affecting the eyesight, and distinguishable by ophthalmoscopic examination. These indicate vascular spasm in various parts, and probably the same primary cause produces all; but what the condition may be which sets up spasm of the arterioles has still to be determined. The other cases I have described were attended with a peculiar paroxysmal numbness and paresis of the hands, described by several observers lately, and called "night palsy," which has some analogy to these conditions. It is said to occur chiefly during the night, and in women of emotional disposition, or at the menopause, when neurotic phenomena are so common. Its occurrence in men has been noted, and is exemplified in Case 3. The patient wakes up to find the hand numb and cold, with tingling "pins and needles" or absolute pain. There is loss of power, and sometimes blueness and swelling of the hand, due to distension of the veins. Narrowing of the calibre of the radial artery has been described. The condition is always relieved by rubbing. One observer finds it always associated with disorded stomach—a neurosis, be it observed, common at the menopause, another sees it only in anæmic persons; and in several cases overwork is traced as a possible cause. Dr. Liveing mentions the occurrence of a similar numbness of the extremities associated with megrim, as in one of these cases (Case 4). Night palsy then occurs under similar conditions to those found in the subjects of "dead fingers," and like the latter it is paroxysmal; in its severer forms it produces coldness of the affected part with diminution of the arterial calibre. Dr. Ormerod,[2] when describing night palsy, mentions its similarity to Raynaud's disease, and emphasises the points of difference. I should be inclined to look upon night palsy, local syncope (or "dead fingers"), local asphyxia, and even symmetrical gangrene, as phases of one and the same morbid condition, the severity of the case, or the time at which the symptoms occur, determining for each under which name the neurosis shall be described.

Seymour-street, W.

THE PROSTATE MUSCLE.

By REGINALD HARRISON, F.R.C.S.,

SURGEON TO THE LIVERPOOL ROYAL INFIRMARY, AND LECTURER ON CLINICAL SURGERY IN THE VICTORIA UNIVERSITY.

IN previous communications[3] I have drawn attention to the nature and causation of prostatic hypertrophy. There are one or two points arising out of these to which I should like to refer.

We have been too much accustomed to regard the prostate from its post-mortem aspect—that is to say, as a mass of muscle about the size and form of a chestnut, in which is contained some secreting tissue. It will be as well clearly to understand that under no circumstances during life, save the rare and momentary one when the bladder is absolutely empty, does the healthy prostate present such a form as that referred to; on the contrary, the muscular fibres of which it is largely composed are spread out like a funnel, so as to form an ample support for the bladder and its varying amount of contents. The degree to which it is spread out is, of course, relative to the contents. Hence the action of the prostate may be said to be just as continuous as that of the heart. This is a point which can be readily determined by examining persons in different bodily positions, and under varying circumstances so far as the contents of the bladder are concerned. If a person is examined by the finger in the rectum when he is in a semi-erect position, with a healthy prostate and some urine in the bladder, it will be found that the limits of the prostatic area are bounded on either side by a marked ridge of muscular fibre in a state of more or less tone, whilst the centre of this area is softer and more yielding to the touch. In making an examination of this kind for the first time, and taking our idea from what we have previously learnt in the dissecting-room, we naturally expect to find the converse of this—namely, a rather hard centre, which gradually loses its definition as the finger passes towards the sides. It is a matter of common remark that, unless the prostate is diseased, a surgeon has to examine it a good many times before he thinks he can realise what he has learnt as a part of his anatomical studies.

We may, I think, conclude that the primary function of the prostate is that of supporting and controlling the outlet of the bladder. Where there is no such function to fulfil, the prostate muscle is only met with in a rudimentary form, as we see in cases of extroversion of the bladder where there is no receptacle for the urine. In advanced life, so far as I have been able to ascertain, hypertrophy of the prostate in these malformations never occurs.

That this is the principal function of the prostate is further indicated by what follows wounds inflicted on the urinary tract from the bladder downwards. The only incision that renders a person absolutely incontinent for a time is when the prostate muscle is involved. Openings made into the membranous urethra, either for exploration or for median lithotomy, are not followed by incontinence unless the prostate has been temporarily paralysed by over-distension with the finger. In lateral lithotomy the continence of the bladder by the action of the prostate is maintained to the last moment of the deep incision, when the gush of urine will often carry the stone into the jaws of the forceps. Nor does continence return until sufficient time has elapsed for healing to take place.

I have met with several cases where stones in the bladder have occupied unusual and somewhat remarkable positions relative to what may be regarded as the laws of gravity. I refer to those instances where the calculus is lodged in a sort of space hollowed out above the pubes. On two or three occasions I have had to reverse the blades of the forceps to extract stones from this position, and I have twice recently met with instances where the sound passed beneath calculi thus placed without giving a clue, and thus causing errors in diagnosis which this knowledge enabled me to correct. From my observation of calculi in the bladder I am disposed to connect their occasional supra-pubic position with the upheaving movement of the floor of the viscus, which is constantly, though imperceptibly, going on, principally through the medium of the spread-out muscular fibres of the prostate. From the dissecting-room standpoint it would seem almost impossible to understand how a healthy prostate could influence the position of a stone in the bladder in the slightest degree; when, however, we learn to recognise how differently the muscle is disposed and occupied during life from what we previously believed, it is not difficult to see that a vermicular movement of the muscular floor of the bladder, which is constantly going on, might tend to lodge and fix a calculus above the pubes. It is quite clear, however, that a stone independent of sacculation, occupying a resting-place in the anterior wall of the viscus, must have been put and retained there by some agency. These points will, I think, be found to have their bearing upon the practical surgery of the parts referred to.

[1] De l'Asphyxie locale, et de la Gangrène symmétrique des Extrémités, Paris, 1861. [2] St. Bartholomew's Hospital Reports, 1883. [3] THE LANCET, March 6th and Aug. 28th, 1886.

VICTORIA UNIVERSITY. — The Manchester City Council on the 1st inst. passed a resolution in favour of a Government grant to Victoria University. It was stated that not a penny had been contributed by the Government either to Owens College or Victoria University, both of which were in need of financial assistance, and it was thought that in view of the fact that the Government had paid £12,000 to small colleges in Wales, Victoria University had some claim.

A CASE OF ALBUMINURIA;

DEATH RESULTING FROM ACUTE ŒDEMA OF THE BRAIN.

BY HENRY WILCOX, M.B., M.R.C.S.

THE following case, which came under my notice while returning from my holiday trip to New York, may be worth publishing, as the carefully recorded temperature throws some light upon the etiology of uræmic coma:—

S. T——, aged fifty-one, a gentleman of spare appearance, florid complexion, looking somewhat older than his age, occupied the seat opposite to me at the saloon table. From my observations, and from several conversations we had together, I found he was in a shattered state of health; his habits were those of a man who for a long time had drunk freely of spirits, giving me the impression that he was suffering from chronic Bright's disease, accompanied by the usual dyspepsia and want of appetite. On the morning of the fourth day of our voyage he appeared to be in better health and spirits than during the previous three days; his skin was clearer and he ate more; later in the day, however, he complained of severe occipital headache. He was not alarmed at this symptom as he had frequently had it before in a milder degree, when it generally passed away in a few hours. He declined to apply for the advice of the surgeon of the ship. Towards the middle of the day, his headache still continuing, he retired to his state-room, with the intention of "sleeping it off," as he expressed it. Nothing more was seen of him until 4 P.M., when the bedroom steward finding him to be sleeping soundly left him undisturbed. At 6 P.M. he was still sleeping, and the attention of the surgeon was called to him. This gentleman (Dr. Coffey) soon afterwards asked me to visit the patient with him. We found he was in a state of profound coma. Our combined efforts failed to rouse him in the least. His breathing was stertorous; face dusky, slightly œdematous; pupils fixed, insensible to light, and the left larger than the right; carotids pulsating strongly; no abnormal sounds about the heart's action; pulse 72, hard; temperature 97°; legs and feet slightly œdematous. We were fortunately able to make an examination of the urine, which, so far as we could learn, had been normal in quantity and general appearance; it was highly albuminous, and we estimated roughly that the deposit, after boiling and the addition of nitric acid, was one-third of its bulk. From these evidences we concluded that the patient was in a state of uræmic coma. Dr. Yarrow of Philadelphia, who was also a passenger on board, endorsed this opinion, and watched the case to the end with us. The treatment we employed was first wet cupping over the loins to twelve ounces; there was no jaborandi on board, but we administered hydragogue cathartics by enemata, subcutaneous injection of digitalis, mustard sinapisms to the nape of the neck and calves of the legs, and occasional nutritive enemata with a little brandy. In spite of our efforts the patient showed no signs of improvement, the coma becoming more profound; convulsive fits came on at intervals, greatly exhausting his vital powers. He died after a severe paroxysm about four o'clock in the morning. During the few hours that we were in attendance we were able to make careful observation of the temperature, which we took constantly in the axilla at intervals of about half an hour from nine o'clock at night until the time of his death. Early in the evening there appeared an initial lowering of the temperature; at 7 P.M. it was 97°; the pulse 72, full, incompressible; carotids strongly pulsating. At 9 P.M. a slight rise in the temperature was noted; it was then 99°. At 10 P.M. it was 100·2°; at 11 P.M., 101·4°; at midnight, 102°; at 1 A.M., 103·4°; at 2 A.M., 105°; at 3 A.M., 107°; and at 4 A.M., 109·2°. The last record of temperature was taken both in the axilla and rectum. The thermometer in the rectum was expelled in the death struggle; it indicated 109·2°, the same as that in the axilla; had it remained longer, a higher temperature would probably have been recorded. As the temperature began to rise the pulse assumed a different character, becoming faster, smaller, and easily compressible; shortly before death it was 135 per minute, and the respiration 38.

The point of interest in this case is the remarkable rise of temperature preceded by a stage of initial lowering, and between these two conditions there was a stationary period from 7 to 9 P.M., in which the temperature was normal. The presence of urea in the blood, or even its product of decomposition—carbonate of ammonia,—may account for the coma and convulsions, but they have not been found to produce this influence upon the temperature. Variations of temperature, however, in the apoplectic state accord so well with the above that we may fairly assume that our patient died not so much from the toxic state of his blood as from a sudden acute œdema of the brain, with perhaps effusion into the ventricles. This view of the case is, I think, supported by the following considerations:—1. The secretion of urine at the time of seizure was normal or increased in quantity. 2. The sudden onset of cerebral symptoms preceded by intense occipital headache. 3. The strongly pulsating carotids, and full incompressible pulse at the beginning of the attack. 4. The variations of temperature were the same as those observed in cases of cerebral hæmorrhage, in which death occurs in from ten to twenty-four hours.

Woolwich.

LITHOLAPAXY IN MALE CHILDREN AND MALE ADULTS.

BY SURGEON-MAJOR D. F. KEEGAN, M.D. DUB.,
RESIDENCY SURGEON, INDORE, CENTRAL INDIA.

DURING the past two years I have published four papers[1] giving details of a considerable number of litholapaxies performed on male children and male adults at the Indore Charitable Hospital, Central India. At a time when the treatment of stone in men, women, and children is attracting so much attention in Europe, by reason of the revival of the "high" operation, perhaps it may not be amiss if one who has enjoyed considerable opportunities of treating stone in India were to place before his professional brethren in England his experiences of litholapaxy in male children and male adults. I advocate litholapaxy in preference to lateral lithotomy in the treatment of the great majority of stones we meet with in male children, principally for two reasons—viz., rapidity of cure and absence of a cutting operation. Litholapaxy as applied to the treatment of stone in male children, being a new departure in surgery, must undoubtedly be submitted to the accumulated experience of practical surgeons in all parts of the world before a positive conclusion can be arrived at as to its practicability and value. I therefore beg to submit to the judgment of surgeons in Great Britain the record of a considerable number of litholapaxies performed on male children in India. Having discussed this operation in its application to the treatment of stone in boys, I shall subsequently deal with some points of interest connected with its performance in the adult male. Believing, as I do, that Bigelow's operation will, in the near future, supersede to a very large extent lateral lithotomy in the treatment of stone in male children, I am all the more anxious on that account that my predecessor at Indore, now retired, Deputy Surgeon-General T. Beaumont, should obtain the credit of having originated the idea of the feasibility of practising litholapaxy in boys. I, however, was the first to put his ideas on this subject into practice. He had performed six lithotrities successfully on male children at Indore prior to my succeeding him, and had ordered to be sent from London lithotrites and evacuating catheters suited to the performance of litholapaxy in boys a few months before he left Indore for Hyderabad in the Deccan. He was not the first to perform litholapaxy in boys, simply because he had not an opportunity of doing so at Hyderabad; but had he remained on at Indore he would undoubtedly have put his ideas into practice at the first favourable opportunity. Soon after my joining my present appointment at Indore the lithotrites and evacuating catheters suited to the performance of litholapaxy in boys arrived from London, but I must confess that for some time I hesitated to use them. Like many surgeons practising in India, lateral lithotomy in male children had hitherto proved a very successful operation in my hands, and therefore I was naturally somewhat loth to change it for any other method of removing a stone from a boy's bladder. However, in December, 1881, I performed

[1] Indian Medical Gazette, May, 1884, June and September, 1885, and June, 1886.

TABLE

SHOWING PARTICULARS OF FIFTY-EIGHT LITHOLAPAXIES PERFORMED ON BOYS AT THE INDORE HOSPITAL FROM DECEMBER, 1881, TO MARCH, 1886.

Cases.	Ages.	Caste.	Date of operation.	Time occupied by operation, in minutes.	Time occupied by crushing, in minutes.	Time occupied by evacuation, in minutes.	Time occupied by manipulation, in minutes.	No. of lithotrite used.	No. of catheter used.	Number of times lithotrite was introduced.	Number of sittings.	Composition of stone.	Duration of disease, in months.	Weight of stone, in grains.	Number of days in hospital.	Result.
1	5	H.	15-12-81	No record	No record	No record	No record	10	9	No record	1	No record	5	No record	25	Succ.
2	8	H.	21-4-82	Do.	Do.	Do.	Do.	10	9	Do.	1	No record	15	Do.	14	Do.
3	7	M.	11-10-82	Do.	Do.	Do.	Do.	10	9	Do.	1	No record	No record	30	9	Do.
4	8	H.	7-2-83	45	Do.	Do.	Do.	10	9	Do.	1	Phosphatic	Do.	15	2	Do.
5	2½	H.	16-3-83	No record	Do.	Do.	Do.	7	9	1	1	No record	Do.	10	3	Do.
6	5	M.	28-6-83	35	Do.	Do.	Do.	10	9	No record	1	Uric acid	Do.	17	12	Do.
7	4	H.	26-9-83	30	Do.	Do.	Do.	10	9	Do.	1	Uric acid	Do.	55	3	Do.
8	7	H.	27-9-83	No record	Do.	Do.	Do.	10	9	Do.	1	Uric acid	Do.	5	3	Do.
9	8	H.	9-10-83	29	Do.	Do.	Do.	10	9	Do.	1	Uric acid	Do.	15	10	Do.
10	5	H.	9-10-83	70	Do.	Do.	Do.	10	9	Do.	1	Uric acid	Do.	84	9	Do.
11	4	H.	15-12-83	No record	Do.	Do.	Do.	7 & 10	9	Do.	3	Phosphates growing round tilli stalk	10	35	16	Died.
12	10	H.	17-12-83	Do.	Do.	Do.	Do.	10	9	Do.	1	Phosphates	No record	200	9	Succ.
13	5	H.	23-12-83	60	Do.	Do.	Do.	10	9	Do.	1	Uric acid	6	158	11	Do.
14	3	H.	26-1-84	38	Do.	Do.	Do.	10	9	Do.	1	Uric acid	12	104	7	Do.
15	5	H.	16-2-84	30	Do.	Do.	Do.	10	9	Do.	1	Urate of ammonia and uric acid	6	51	12	Do.
16	12	H.	3-3-84	55	Do.	Do.	Do.	10	9	Do.	1	Bartty and triple phosphates	24	240	11	Do.
17	2	H.	10-3-84	4	Do.	Do.	Do.	7	9	Do.	1	Uric acid	4 days	7	2	Do.
18	1½	H.	27-3-84	32	Do.	Do.	Do.	7	7	Do.	1	Uric acid	4	18	4	Do.
19	7	M.	12-5-84	6	Do.	Do.	Do.	10	9 & 12	5	1	Phosphates	24	160	15	Do.
20	3½	H.	26-5-84	67	Do.	Do.	Do.	7 & 10	9	5	1	Phosphatic	12	75	8	Do.
21	9½	H.	29-5-84	70	Do.	Do.	Do.	7	7	5	1	Uric acid	24	24	3	Do.
22	6	M.	3-7-84	60	30	27	3	10	9 & 11	6	1	Uric acid and oxalate of lime covering	48	210	8	Do.
23	4	H.	22-8-84	53	No record	No record	No record	8	7 & 9	4	1	Uric acid	10	38	13	Do.
24	11	H.	20-11-84	112	45	41	26	8	12	7	1	Oxalate of lime	12	308	14	Do.
25	2	M.	10-12-84	20	10	4	6	7	7	3	1	Lithic acid	12 days	5	10	Do.
26	8	H.	30-1-85	104	85	39	10	8	9	9	1	Phosphatic	60	285	5	Do.
27	10	H.	30-1-85	85	54	20	11	8	9	7	1	Phosphates and uric acid	24	170	6	Do.
28	9	H.	19-3-85	78	33	30	25	8	7 & 9	6	1	Uric acid	12	90	5	Do.
29	10	H.	27-3-85	10	5	3	2	8	9	1	1	Oxalate of lime	24	43	2	Do.
30	5	H.	5-4-85	58	26	21	11	8	9	6	1	Phosphate of lime	6	140	4	Do.
31	7	H.	11-4-85	31	11	9	11	8	9	3	1	Mulberry with slight covering of phosphates	48	57	4	Do.
32	11	H.	13-4-85	67	29	14	24	8 & 10	12	6	1	Pure mulberry	48	236	9	Do.
33	10	H.	28-4-85	90	41	30	19	8	9	6	1	Oxalate of lime	24	200	5	Do.
34	7	H.	30-4-85	43	16	14	13	8	9	4	1	Oxalate of lime	36	140	3	Do.
35	10	H.	2-5-85	80	31	25	24	7 & 8	7 & 9	8	1	Phosphatic and uric	4	91	11	Do.
36	4	H.	7-5-85	41	14	13	14	7 & 8	7	4	1	Mulberry with phosphatic covering	9	37	3	Do.
37	10	H.	27-5-85	94	47	35	12	8	9	6	1	Urates and phosphates	72	360	8	Do.
38	2½	H.	9-6-85	17	7	3	7	7	7	4	1	Uric acid	3	11	4	Do.
39	2½	M.	9-7-85	31	14	10	7	8	7	5	1	Uric acid	2½	53	3	Do.
40	8	H.	1-8-85	57	18	16	23	8	7 & 9	5	1	Oxalate of lime	No record	28	4	Do.
41	2	H.	16-8-85	21	7	4	8	7	7	2	1	Uric acid	3	8	5	Do.
42	5	H.	9-9-85	62	22	17	23	7	7	9	1	Uric acid and phosphates	6	41	4	Do.
43	3	H.	15-9-85	18	8	4	6	8	7	3	1	Phosphates with nucleus of oxalate of lime	5	12	3	Do
44	9½	H.	19-9-85	182	94	37	51	11 & 15	13 & 14	26	1	Uric acid, nucleus oxalate of lime with phosphatic cover	24	700	10	Do.
45	8	H.	29-9-85	38	17	10	9	10	11	6	1	Uric acid and phosphates	12	176	8	Do.
46	12	H.	30-9-85	62	33	14	16	11 & 14	12 & 13	9	1	Oxalate of lime	12	344	4	Do.
47	8	H.	1-11-85	30	15	10	5	7 & 8	7 & 9	5	1	Phosphates	24	72	9	Do.
48	5	H.	4-11-85	24	10	6	8	7 & 8	7 & 9	4	1	Uric acid	12	32	10	Do.
49	13	H.	8-11-85	48	27	11	10	11	12	7	1	Uric acid and oxalate of lime	48	272	12	Do.
50	2½	M.	11-11-85	30	10	8	12	7	7	4	1	Uric acid with slight phosphatic cover	3	16	4	Do.
51	6	H.	17-11-85	12	5	2	5	8	8	2	1	Mulberry and uric acid with slight phosphates	6	23	3	Do.
52	4½	H.	16-12-85	45	24	10	11	8	8 & 10	4	1	Uric acid	10	118	5	Do.
53	3½	H.	6-2-86	37	10	5	22	8	8 & 9	4	1	Uric acid	12	70	8	Do.
54	14	H.	12-2-86	60	31	22	7	8 & 11	9 & 10	6	1	Fawn-coloured uric acid	24	248	11	Do.
55	3½	H.	23-2-86	10	5	2	3	7·75	7	2	1	Oxalate of lime	18	13	4	Do.
56	14	H.	27-2-86	10	3	1	6	7·75	9	1	1	Phosphates	4	19	2	Do.
57	6	H.	26-2-86	56	16	30	20	7·75	8 & 9	5	1	Uric acid and oxalate of lime nucleus	6	105	9	Do.
58	6½	H.	25-3-86	39	11	12	16	7	7	6	1	Uric acid and phosphates	3 days	14	5	Do.

TIGHTLY BOUND

litholapaxy successfully on a boy aged five years. In the succeeding year I operated on two boys by this method. During the years 1883 and 1884 ten and twelve boys respectively were subjected to litholapaxy at the Indore Hospital. During the year 1885 we performed twenty-seven litholapaxies on boys; and between January 1st of the present year and the end of March, when I left India on furlough, six boys were operated on by Bigelow's method at this hospital. We have therefore performed fifty-eight litholapaxies on boys at Indore since I began this operation on male children at the close of 1881, and we have lost one case. Cases 12 and 13 in the table appended were performd by my assistant Mr. Gunput Singh; and my friend Surgeon-Major Caldecott, during my absence from Indore, performed nine operations of this series, beginning at No. 41 and ending at Case 49. Case 11, the only unsuccessful one, was operated on in the first instance by my assistant, and on two subsequent occasions by me. All the other cases in this table were performed by me alone. That litholapaxy is capable of dealing successfully with stones of considerable size occurring in male children is, I think, proved by the facts detailed in the accompanying table; and from what I have already stated it will be seen that I practised litholapaxy in male children very tentatively at first, and as time went on, and I had gained more experience, I gradually increased the scope of this operation.

Now, what are the conclusions at which I have arrived after nearly four and a half years' experience of litholapaxy in the treatment of stone in male children? I may at once answer this question by stating that, with my present experience of this operation in boys, I would almost as soon think of performing lateral lithotomy on an old man the subject of a small, uncomplicated stone as I should think of performing lateral lithotomy on a boy whose urethra would readily admit the passage of suitable lithotrities and evacuating catheters, and whose stone was neither abnormally hard nor large. The only cases of stone in male children which I nowadays reserve for lateral lithotomy are those in which litholapaxy is contra-indicated by reason of the existence of a very narrow urethra or the presence of an unusually hard or large stone. I am well aware that in advocating litholapaxy in the treatment of stone in male children I am running counter to the cherished opinions and judgment of many eminent lithotomists, and I know that some high authorities consider my views on this subject heterodox and dangerous in practice. But facts and figures are on my side, and I can therefore, perhaps, afford to disregard the adverse opinions of those who have never practised this operation in boys. I am anxious to draw a very marked line of demarcation between lithotrity and litholapaxy as applied to the treatment of stone in male children. I hold that lithotrity is an uncertain, tedious, and often dangerous method of disposing of stones in boys, because the surgeon in performing it can never be perfectly sure that he has reduced the stone in the bladder into fragments sufficiently small to pass of themselves readily through the urethra along with the urine, and thus a second operation, with all its train of suffering and dangerous complications, is often a necessity. Indeed, I consider that the success and safety of litholapaxy as applied to children depend in a very great measure in not leaving, if possible, the smallest fragment of stone behind in the bladder. Lithotrity at many sittings, the lithotrity which preceded Bigelow's operation, is happily dead and buried, and is even less suited to the treatment of stone in male children than it is to the treatment of stone in adult males.

The chief objections which have been raised against the performance of lithotrity and litholapaxy in boys, are, as we all know, the undeveloped condition of the genito-urinary organs, the smallness of the bladder, the extreme sensitiveness and liability to laceration of the mucous membrane of the bladder and urethra, and the narrowness or small calibre of the urethra. Let us examine these objections. If by the undeveloped condition of the genito-urinary organs in boys is meant an undeveloped condition of the prostate, this is for the surgeon a decided advantage, as recently pointed out at the Medical Society of London by Mr. W. J. Walsham, when detailing the history of a very instructive case of litholapaxy performed on a boy aged ten. The smallness of the bladder in boys is, in my opinion, not a valid objection to the performance of litholapaxy. The bladder of a boy of even only three or four years of age is, as a rule, quite roomy enough to permit of the efficient working of a small lithotrite; and if a medium-sized aspirator be used in the removal of fragments of stone, or a full-sized aspirator be gently worked, no injury can be done to this organ by over-distension. The bladders of boys suffering from stone are as a rule healthy, and will stand more distension proportionately to their size or capacity than the bladders of old men. The next objection we come to is the extreme sensitiveness of the mucous membrane of the bladder and urethra. With regard to this objection, I would merely remark that, as litholapaxy is always performed on patients under the influence of an anæsthetic, this objection may be safely disregarded; and I would add, in passing, that it has yet to be proved that the urethra of a boy, say of six years of age, is more sensitive than the urethra of a youth approaching puberty. Indeed, I am inclined to think that the urethra of the latter is the more sensitive of the two. We now come to the liability to laceration of the mucous membrane of the bladder and urethra in boys. Theoretically this may appear a very plausible objection; but in practice it may also be safely disregarded, if the surgeon employs suitable instruments, and is careful and skilful in their use. I have performed nearly fifty litholapaxies in boys, and, as far as I can judge, I have never damaged the mucous membrane of the urethra and bladder; and even if I have done so, no untoward consequences have supervened. We come at length to the last objection to the performance of litholapaxy in boys—viz., the narrowness or small calibre of the urethra. Now, if it were a fact that the size or calibre of the urethra in male children is generally very small, this would, of course, be an insuperable objection to the performance of litholapaxy in these young patients. *But it is not a fact* that the calibre of the urethra in boys of six or eight years of age is, as a rule, very small. On the contrary, the calibre of the urethra of boys of only three or four years of age is sometimes very large, as I shall show later on by citing examples of this fact from the pages of my case-book. True it is that the meatus of the urethra in male children is sometimes very small; but let the orifice be incised, and it will then be generally found that a lithotrite of considerable size will pass readily into the bladder. It may seem somewhat strange that a false estimate of the normal size of the urethra in male children should have existed until very recently; but it is really no more strange than that surgeons should have believed up to the date of the discovery of Otis that the calibre of the adult male urethra was much smaller than it really is. I think that the chief reason why an erroneous estimate of the normal size of the urethra in boys has hitherto prevailed is, that in performing the old operation of lithotrity in male children the meatus of the urethra was seldom divided, and thus the true calibre of the normal urethra in boys was ignored or not noticed. I certainly was unaware of the normal calibre of the urethra in boys until I had practised litholapaxy amongst this class of patients, and doubtless, like other lithotomists, I had failed to recall to mind several occasions on which I had been able to pass staffs of large size into the bladders of young boys preparatory to performing lateral lithotomy. Now, what does the annexed table prove regarding the size or calibre of the urethra in boys? Speaking generally, for there can be no hard-and-fast rule laid down on this point, it shows that the urethra of a boy from three to six years of age will admit a No. 7 or a No. 8 lithotrite (English scale), and that the urethra of a boy of eight or ten years of age will admit a No. 10, a No. 11, and even sometimes a No. 14 lithotrite (English scale). With a No. 8 lithotrite and a No. 8 evacuating catheter it is, I find, quite feasible to crush and dispose of a mulberry calculus weighing between two and three hundred grains in an hour's time. Experience has taught me that there is as great a difference in the size or calibre of the urethra in male children of the same age as we find to be the case amongst adult males. Age cannot always be depended on as the measure of the capacity of the urethra in boys, as I know from experience; indeed, some children of only four years of age have more capacious urethræ than other children of ten. Cases 35 and 36 in the annexed table are examples of this fact. The No. 8 lithotrite did not pass with the same facility into the bladder of Case 35, whose age was ten, as it did into the bladder of Case 36, whose age was only four. In some children of four or five years of age it is unsafe to pass a No. 7 lithotrite, although an instrument of this size will sometimes pass readily into the bladder of a boy of only two years of age. Perhaps I shall best illustrate the size or calibre of the urethra in male children by briefly relating the history of some of the cases in the annexed table.

CASE 17.—S——, a male child two years old, was brought by his mother to the Indore Hospital on March 10th, 1884, suffering from symptoms of stone. On being placed under chloroform, I passed a small steel sound and struck a stone in the prostatic portion of the urethra. Withdrawing the sound, I passed a long urethral forceps and seized the stone. I found, however, that the forceps with the stone between its blades could not be withdrawn through the membranous portion of the urethra. I therefore pushed the forceps with the stone between its blades into the bladder and then let go my hold on the stone. Withdrawing the urethral forceps, I then introduced a No. 7 lithotrite into the bladder, seized the stone, and crushed it readily three or four times. To my surprise, a No. 9 evacuating catheter passed readily into the bladder. I then attached a Berkeley Hill's débris extractor to the evacuating catheter and removed the débris, which weighed seven grains and consisted of uric acid. The operation lasted four minutes, and the child left the hospital perfectly well on March 12th.

CASE 18.—F——, a male child one year and nine months old, was carried in his mother's arms to the Indore Hospital on March 24th, 1884, suffering from stone symptoms which had existed for four months. Being placed under chloroform, the stone was struck in the bladder, and I then tried to introduce a No. 9 evacuating catheter, intending to perform litholapaxy. The evacuating catheter would, however, not pass, so the operation was postponed to the 27th. In the interim a clever and very intelligent native workman, who makes many surgical instruments for me from European patterns, made me a No. 7 evacuating catheter. On March 27th, the child being again placed under chloroform, the No. 7 evacuating catheter passed readily. I crushed the stone with a No. 7 lithotrite, which I introduced into the bladder on three occasions, and removed the débris by means of a Berkeley Hill's extractor attached to the No. 7 evacuating catheter. The operation lasted thirty-two minutes, and the stone, which weighed eighteen grains, was composed of lithic acid. There was not a particle of débris left behind in the bladder. On the 28th the child complained of much pain in passing urine, and the penis was somewhat swollen.—29th: Pain in voiding urine much less. Swelling of penis much diminished.—30th: Pain in micturition very slight; swelling of penis nearly subsided. The mother took the child home.

(To be continued.)

A CASE OF

TROPICAL ABSCESS OF THE LIVER, OPENING INTO THE BOWEL; RECOVERY.

BY SURG. G. HARLEY THOMAS, M.R.C.S.,
ARMY MEDICAL STAFF.

PRIVATE P. L——, 1st Battalion Border Regiment, aged twenty-three years, came under my treatment in the Station Hospital, Kasauli, Punjab, on April 3rd, 1885, with symptoms of hepatitis. He had been in India for more than three years, in a hot station. He had never had dysentery, and was not an intemperate man. He had suffered from hepatitis six months previously at Agra. On admission he complained of pain in the right side, over the hepatic region, which was aggravated on breathing deeply; he had also pain in the right shoulder. He had vomited the day before, and still had a feeling of nausea. His liver was much enlarged, chiefly in an upward direction, dulness extending to about an inch and a half below the nipple; there was only slight enlargement below the ribs, no bulgings of the intercostal spaces, and no jaundice. His temperature was 99·2° in the morning, and 100·6° in the evening. He had no rigors. The pulse was normal, the tongue slightly coated, and the bowels constipated. The disease was diagnosed as hepatitis. A sinapism was applied over the liver, and the following mixture ordered to be taken twice a day: one-sixth of a grain of podophyllin, thirty grains of taraxacum, and one ounce of peppermint; also to take a five-grain mercury pill, and to be placed on milk diet. On April 5th his temperature rose slightly, being in the evening 101·6°; his bowels were well open, the motions being white in colour. On the 6th he complained of great pain over the liver; his breathing was quick, and his countenance anxious; his tongue had a white coating, with raised papillæ; his temperature was 100° in the morning and 103° in the evening, but he had no rigors. A blister was applied to the right side, the mixture and pill were omitted, and eight grains of chloride of ammonia in an ounce of water was ordered to be taken thrice a day. On the 7th he was better; the temperature was almost normal in the morning, and only rose to 101° in the evening; he perspired freely during the night. His temperature now varied between 99° in the morning and 102° in the evening up to the 10th, when on that date, after having been eight days in hospital, he was seized with a rigor about the middle of the day, and his temperature dropped from 101·2° in the morning to 99·2° in the evening, and pus was observed in his motions for the first time (about two drachms in each stool). A hepatic abscess was then known to exist. On the 11th he felt much better; the temperature remained normal both morning and evening; the pain in the hepatic region was considerably less; his tongue was coated, but moist; he had only one motion, which was dark-brown and semi-solid, and about four drachms of cream-coloured pus were passed with it; his urine was high-coloured, and contained lithates, but no albumen. The chloride of ammonia was now stopped, and the following ordered to be taken three times a day: perchloride of iron, ten minims; simple syrup, one drachm; and infusion of calumba, one ounce. Also some extra milk and eggs were given him. From the 11th to the 23rd his temperature remained subnormal; he had one or two solid or semi-solid motions daily, passing three or four drachms of sanguineous pus with each stool; but on the morning of the latter date he complained of pain below the sternum, his temperature rose to 100·2°, his pulse was 100, and for the last two or three days he had passed no pus from the bowel. A sinapism was applied to the tender spot, and a diaphoretic mixture administered. On the 24th the hepatic pain was considerably less; his temperature remained high, being 102°. He passed a small solid motion, with some thick unhealthy pus. Five grains of blue pill were ordered. On the 25th his temperature dropped to normal again; his bowels were well opened after the pill, the first motion containing a good deal of decomposing pus, but only a trace of matter in the remaining stools. On the 26th his bowels were open twice, and no pus was passed. The temperature and pulse were normal. From this date, and throughout the whole of the month of May, the patient passed small quantities of pus every two or three days (about three drachms with each motion); his bowels were nearly always regular, and his temperature kept normal; but he was still troubled with a pain in the right side, especially when drawing a deep breath, and he could not lie on that side. He was placed on chicken diet, with extra milk and eggs, and sometimes stimulants. During the month of June he progressed very favourably, and began to gain flesh. A small amount of pus was still passed occasionally. The liver had much contracted, the dulness had diminished in front, and his temperature kept normal. In July he was convalescent, his general health and strength had much improved, no pus had been observed in his motions for three weeks, the hepatic pain had entirely disappeared, and on Aug. 2nd he was discharged from the hospital cured.

Remarks.—The above case is an example of great structural changes going on in the liver without the patient being aware that there was anything very serious the matter with him. It was only eight days after admission into hospital that the abscess burst into the bowel, while a few days before admission the man had been marching about ten miles daily, and had enjoyed fairly good health from the time of his discharge from the Agra hospital six months previously. But this is frequently the case when the inflammation of the organ is caused by the combined effects of great heat and malaria. It will be observed that the bursting of the abscess was followed by an immediate fall of temperature, which remained slightly subnormal for twelve days; it then suddenly rose, and this indicated decomposition of pus taking place, especially as none had been passed with his motions for a few days previously to this rise of temperature; but as soon as the unhealthy matter was discharged the temperature dropped to normal again. The previous history of hepatitis, which lasted a long time, doubtless caused extensive adhesion between the liver and the abdominal walls, so that, although the abscess burst

quickly after his admission into hospital, the pus was thus prevented from being discharged into the abdominal cavity, and causing his death.

Umballa, Punjab.

CURATIVE TREATMENT OF VAGINAL HYDROCELE BY CORROSIVE SUBLIMATE.

BY JAMES MILLER,

SURGEON TO THE LONDON GASLIGHT AND COKE COMPANY, NINE ELMS STATION; VISITING SURGEON TO THE SOUTH LAMBETH AND STOCKWELL DISPENSARY.

THE treatment of vaginal hydrocele by tapping is so simple that were it *per se* curative instead of being merely palliative, as is usually the case, there would be no need of any further method. But unfortunately such is not the case, and when an individual is tapped for the first time, it is simply one of a series of operations which will have to be repeated from time to time at longer or shorter periods, varying with different persons, and sometimes with the same one.

Various methods for the radical cure have been suggested and carried out, the latest probably being that recommended by Mr. Bellamy[1]—viz., "a clean sweep through all the scrotal tissues from the cord to the base;.....the cavity is then to be stuffed with carbolised lint or gauze, and the upper part of the wound brought together by stitches." But, though undoubtedly good, this is bold treatment, and such as many men would not submit to, for the reason that their hydroceles give them little or no pain, and they are more content to go on with the tapping process now and then than take the risk of the knife. If, however, at the time of tapping, an injection can be used which will cure the hydrocele without compelling the patient to keep to his bed or give up his work for a time, there is a distinct gain upon the various methods of treatment at present in vogue. And such an injection I believe we have in corrosive sublimate, as illustrated by the following cases.

CASE 1.—B. C——, aged forty-five, a stoker, had been troubled with hydrocele (left) for about two years. It was the usual history of a gradual and painless enlargement. Only the inconvenience of having so large a burden in such an awkward place induced him to seek some relief. I therefore tapped him, and the process was repeated four times in two years, there being only an interval of three months between the third and fourth operation, which tended to dishearten him. As he could not afford to lose time and "lay up," I therefore determined to try what the injection of a small quantity of corrosive sublimate would do. Accordingly I prepared a solution of one grain of the salt in an ounce of distilled water, and injected fifteen minims ($=\frac{1}{4}$ of a grain) of this into the sac. The *modus operandi* was very simple. Having evacuated the contents of the sac, I charged a hypodermic syringe of the above capacity with the liquid, and fitted it into the cannula which had been left *in situ*, discharged the contents into the sac, and removed the cannula in the perpendicular. The man felt no more than if he had only been tapped. This was done on Saturday evening, Jan. 3rd, 1885. I saw no more of him until the following October, when, on inquiry about his hydrocele, he informed me that it had all gone; in fact, he had not been troubled with it since I "injected the stuff." He stated that he experienced some sharp pain during the first night, but it passed off, and he went to work on the Monday as usual. On examining the scrotum there was no deformity or enlargement to be seen. It was perfectly natural.

Having another patient troubled with hydrocele, I was therefore glad to know the result of this first case, which, being so satisfactory, I did not hesitate to repeat.

CASE 2.—A. M——, aged thirty-eight. On Nov. 14th, 1885, I treated this patient in the same way. Here, again, was another ordinary vaginal hydrocele (left). Having drawn off twelve ounces of blood-stained fluid, I injected the solution in the same quantity and the same strength as before. In this case, however, I anticipated any after-pain by ordering some belladonna liniment to be sprinkled on lint and applied to the scrotum. On Nov. 16th, there had been no pain, and the patient had slept well at night, but the sac was rather more distended than it was immediately after the operation. I ordered him to keep on the sling which he had worn previously, and in a few days the fluid had been reabsorbed and the swelling was much less. In a few days more the swelling had all disappeared, and has not troubled him since.

In addition to the above cases I have treated two others on the same lines as the last, but there is no history to them. They were injected after evacuation, and disappeared without trouble. The gains by this simple method are great, for though the means used are the minimum for palliative treatment, the result is the maximum of curative treatment, and this without loss of time to the patient, which to most men is a great consideration.

South Lambeth-road, S.W.

[1] THE LANCET, July 4th, 1885.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collec as habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

CASE OF BILIARY COLIC WITH JAUNDICE OF TWO YEARS' DURATION; EXPLORATORY OPERATION; DEATH; NECROPSY; REMARKS.

(Under the care of Dr. PRINGLE.)

THE following case is one of considerable interest, and will be attentively perused by all interested in abdominal surgery. The condition of the part as found at the time of operation was unusual, and exceptional difficulties were encountered, making it impossible either to remove the stone through the wound or to crush it *in situ*. The gall-bladder lay so deeply that the ordinary method of attaching it to the wound could not be employed, and its position also prevented suture of the incision which had been made in it for the purpose of exploration of its interior. On this account a ligature was applied round the gall-bladder above the incision, the part below being removed, and it was thus hoped that the extravasation of its contents would be prevented. This procedure appears to have been effective until the general cavity of the peritoneum was shut off by adhesions.

Elizabeth L——, a widow, aged fifty-five, was admitted under the care of Dr. J. J. Pringle on Sept. 8th, 1886. No facts of importance in regard to her family history were elicited, except that her mother had died of heart disease, and that four brothers still alive are subject to rheumatism. Her previous health had been uniformly good, interrupted only by seven pregnancies and several attacks of rheumatism, affecting chiefly the small joints of the hands and feet, the most severe of which kept her confined to bed for six weeks in the spring of 1884. In September of that year a varicose vein in the right leg "burst," and during her consequent confinement to bed she was suddenly seized with severe pain in the abdomen, starting from the right side, radiating towards the spine, and becoming general over the abdomen; uncontrollable vomiting accompanied this attack, which lasted two days, and after it her skin and conjunctivæ were noticed to be yellow. Similar attacks, of varying intensity, recurred once or twice a week until April 4th, 1886, when she first came under observation as an out-patient. She then stated that her appetite was good, but that she was "afraid to eat," as solid food invariably caused pain, relieved only by vomiting; her bowels were very confined. Under palliative treatment directed to these symptoms (bismuth, carminatives, saline purgatives), she improved remarkably for nearly three months; but from the beginning of July onwards she had a great number of attacks; her jaundice became deeper; she rapidly emaciated and suffered from sleeplessness, due to her constant pain and mental worry from inability to attend to her domestic and business affairs. Recognising the gravity of her condition she at length con-

sented to her admission into the hospital, and to submit to any measure considered advisable for her.

State on admission.—An intelligent, big-framed woman, with drawn features expressive of pain, dilated facial capillaries, jaundiced tint of skin and mucous membranes, and chronic rheumatic deformity of the joints of both hands and feet. The superficial veins of both legs are varicose, and there is a large number of hæmorrhages into the skin of the lower extremities and trunk with evidences of much scratching, although the patient states that she does not itch now as formerly. Since first coming under observation she has lost flesh greatly. The pulmonary physical signs are normal. There is no physical evidence of hypertrophy or dilatation of the heart, but over the position of the apex beat is a distinct, though soft, systolic bruit conducted towards the axilla. Over the area of the aortic valve is a harsher systolic bruit, distinctly heard in the right carotid artery, and loudest in the first right interspace close to the sternum; the second sound everywhere is sharp and clear. The radial pulse is small, rather incompressible, and beats 88 to the minute. The abdominal walls are lax, permitting thorough examination of the viscera. Hepatic dulness extends a distance of four inches and a half vertically in the nipple line from the sixth rib to an inch below the costal arch, where the organ can be indistinctly felt; it is soft, its surface not irregular, and manipulation causes no pain. Nothing corresponding to a distended gall-bladder can be detected. Stomach resonance is obtained as high as the fifth rib in the left anterior axillary line, and the patient complains of flatulence. The tongue is large, coated, and transversely furrowed. The urine is of low specific gravity (1008), and contains bile-pigment, but no albumen. The progress of the case during the following six days was eminently unsatisfactory. She was in almost constant pain, relieved only by morphia administered subcutaneously; she vomited repeatedly, and became more and more pinched and exhausted. The abdomen became tender, and its examination badly tolerated; but on one occasion a mass, judged to be about the size of a pigeon's egg, was felt one inch above and two inches to the right of the umbilicus, and the opinion was hazarded that it might be the gall-bladder containing stones. The bowels were acted upon by purgatives, no gall-stones being present in the motions. An exploratory operation was, after consultation, decided upon, its object and risks having been explained to the patient and her relatives.

The operation was performed by Mr. Pearce Gould on Sept. 15th. Ether was the anæsthetic selected, on account of the supposed cardiac disease, and was administered by Mr. Henry Davis. Full antiseptic precautions were adopted, excepting the spray, solution of bichloride of mercury (1 in 2000) being used for sponges and hands. An incision four inches long was made in the right linea semilunaris and continued down to the peritoneum. Previously to opening the peritoneal cavity all bleeding points in the wound were seized with forci-pressure forceps. On opening the peritoneal cavity the liver was at once seen to be considerably enlarged, with a deep notch in its free border in the position of the gall-bladder, but that organ could neither be seen nor felt; the finger when passed in deeply under the liver felt a stone. The omentum and colon were protected and pressed down by a flat sponge, the edge of the liver gently raised, and a careful dissection was made in the direction of the gall-bladder, which was exposed after dividing firm peritoneal adhesions. The bladder was small, did not reach the free border of the liver, and no stone was felt in it. An aspirator was introduced, and about two drachms of pale bile and mucus withdrawn. The puncture was then enlarged to admit the forefinger, but the stone could not be felt from the interior of the bladder. Repeated attempts to pass a probe into the cystic duct failed, nor could the stone be pushed back into the gall-bladder or into the intestine. It was then found to be quite impracticable to stitch the gall-bladder to the abdominal wound, and it lay so deep that an attempt to suture the wound in it was hardly more successful. Under these circumstances the fundus of the bladder was freed from the liver, and a stout silk ligature was tied tightly around the bladder well beyond the wound, and the part incised cut off. Its wall was found to be considerably thickened. The peritoneum of the stump was then stitched over the mucous membrane with fine catgut. The stone was now felt for again, and it was found to be very movable, at times slipping out of reach, so that it was impossible to grasp it between the fingers or in a forceps, or to force it into the duodenum. All hæmorrhage having been stopped and the peritoneal cavity sponged out, the wound was closed with several deep and superficial chromic catgut sutures, and dressed with iodoform wool. The operation lasted a little over two hours.

The case rapidly progressed to a fatal termination. The patient never rallied from the shock of the operation, and complained of intense pain about the wound, relieved only by frequently repeated injections of morphia. Her breathing became laboured, and she presented the physical signs of severe acute general bronchitis with progressive rise of temperature, finally attaining 105° immediately before death, fifty-four hours after the operation.

The necropsy was made by Dr. Pasteur twenty-two hours after death, and showed the following condition:—Rigidity present, integuments deeply bile-stained. On opening the abdominal cavity there was a considerable amount of recent adhesive peritonitis around the edges of the wound, to which the great omentum was adherent. The small omentum was firmly attached to the under surface of the liver, both lobes of which were covered with recent lymph. A short, deep, abnormal vertical fissure, an inch and a half to the left of the falciform ligament, bounded a supernumerary lobe, which probably corresponded to the prominence felt during life. Immediately below the liver, and shut off from the general cavity of the peritoneum by recent adhesions, was an irregular cavity containing some bile-stained fluid, and lying against the liver was the end of the cystic duct surrounded by a ligature. The orifice was not completely closed by the ligature, and easily admitted a medium-sized probe, which passed along the cystic duct a distance of about three-quarters of an inch. There was no evidence of general peritonitis. The liver, stomach, and duodenum were removed *en masse*. The stomach was dilated, but otherwise healthy in appearance. The duodenum was also normal. On compressing the common bile-duct in a downward direction, bile flowed freely into the duodenum. The hepatic and common bile-ducts were enormously dilated, the two forming one straight, cylindrical tube from the liver to within half an inch of the duodenal papilla. Lying in this, and very freely movable in every portion of it, was a single cylindrical stone, 1 in. in length and 1¾ in. in circumference; its lower end squared off abruptly, but above it tapered off in a conical summit much resembling a rifle-bullet. Its weight when dried was 27 grs. The cystic duct was not dilated, and a small probe was now passed with some difficulty from it into the common duct. The portal vein was normal. There were considerable dilatation and hypertrophy of the biliary system throughout the liver, which was unduly tough. The spleen was large and soft; it weighed 9 oz. The kidneys were moderately granular. The heart weighed 10¾ oz.; its cavities contained mixed clot, and were not dilated; there was some fibrotic thickening along the margins of the mitral valve, but no vegetations; the aortic valves appeared normal. There was marked atheroma of the aorta. Both lungs were studded with subpleural hæmorrhages and extensive areas of collapse and broncho-pneumonia. The bronchi contained much frothy mucus.

Remarks by Dr. PRINGLE.—It is obligatory to record in detail all cases of an operation still under discussion, the acceptance of which as a standard surgical procedure must ultimately depend upon the results of extensive collective experience. [Dr. Pringle also refers to the successful results of the operation when performed for distension of the gall-bladder due to impaction of a stone in the cystic duct, not agreeing with an opinion which has been expressed that the occurrence of jaundice during and after the passage of a gall-stone is of extreme rarity.] The case narrated was fully acknowledged not to accord with the type which presents the most favourable conditions for operation, inasmuch as the seat of arrest of the gallstone could not be definitely determined, and the evidence as to distension of the gall-bladder was equivocal. Recorded operative experience upon cases similar in these respects, although admittedly not encouraging, is based upon too small a number of cases to have much value. The patient's constant suffering and rapid downward progress prompted recourse to any measure calculated to afford her the slightest chance of relief. The object of the operation was, in the first instance, exploratory; and after the easy discovery of the gall-stone by the finger it was hoped that its removal would be satisfactorily accomplished, or, at all events, that it might be crushed by padded forceps from outside the duct, as

has been twice successfully practised. Unforeseen difficulties were, however, encountered in the numerous adhesions about the gall-bladder, the removal of which organ became a matter of necessity, and in the extreme mobility of the stone, which it was found impossible to fix at the bottom of so deep a wound. The great thickness of the wall of the gall-duct, found at the necropsy, showed the perfect feasibility of the ingenious manœuvre which has been termed "cholelithotrity." Finally, it cannot be doubted that death was in great measure, if not mainly, due to the lung condition resulting from the administration of ether as the anæsthetic selected, on account of an erroneous intepretation of the cardiac physical signs; and it is hoped that the publication of this fatal case may not deter surgeons from operating upon similar cases, whilst it may forewarn them of some of the difficulties which may have to be encountered.

LIVERPOOL NORTHERN HOSPITAL.

SYNOVIAL CYSTS IN CONNEXION WITH THE KNEE; SYNOVIAL CYST OF THE WRIST; OPERATIONS; RECOVERY; REMARKS.

(Under the care of Mr. CHAUNCY PUZEY.)

CASE 1. *Synovial Cyst in the Calf of the Leg, communicating with the Knee-joint; Synovial Cyst of the Wrist; Operations; Satisfactory result.*—T. W——, aged twenty-four, a printer, was admitted on Feb. 17th, 1885. He said that he had rheumatic fever four years before, that the right wrist-joint and knee-joint were most affected, and that the swelling never quite disappeared from the wrist. A month before admission, after a slight contusion or squeeze of this wrist, an increase of swelling appeared as below described. The man's own expression (as noted by Mr. Horrocks, house-surgeon) was that "it seemed to drive it to both ends."

On admission, there was a rounded, elongated swelling over the radial side of the back of the wrist and hand, extending from the base of the first metacarpal bone to about two inches above the wrist-joint. There was no redness or heat about the swelling, which was divided into two portions by the annular ligament. Fluctuation existed between these two portions, and a sort of soft crepitus was felt occasionally on squeezing the contents from one portion to the other, as if caused by the passage of loose bodies. The man's right knee presented an interesting condition. The joint was considerably distended with fluid, and there was a large fluid swelling in the upper part of the calf of the leg, evidently communicating with the joint. This was diagnosed as an enormously distended bursal swelling or synovial cyst, communicating with the knee-joint, and it was decided to test the man's capability of tolerating operative measures by attempting a radical cure of the wrist before in any way interfering with the knee.

On Feb. 18th, under full Listerian precautions, the tumour in the wrist was freely opened by two incisions, one above and the other below the constricting annular ligament. A considerable quantity of thick synovial fluid escaped, and with it two or three "melon-seed bodies," and two more, which were still attached to the wall of the cavity, were removed by scissors. No tendon appeared. The cyst wall was stitched to the skin by three or four sutures, and the track was syringed through with a solution of carbolic acid and iodine. The usual dressings were applied, and the limb fixed on a splint. No complications arose. The wounds healed by granulation, and on March 4th the patient left the hospital with his hand in the most satisfactory condition. He had been kept in bed most of the time, with the knee-joint fixed in a splint, the result being that the swelling in that part had considerably diminished; and he was advised to go to his home near Manchester, and after resting for a while to try if he could resume work.

On May 4th the man returned to the hospital with the determination to submit to the risk of operation, for he said he could never depend upon his knee not giving way under him, causing him to stumble and fall, whereas his wrist, which before operation had been getting weaker and weaker, was now quite strong and useful. The swelling of the knee-joint, he told us, had existed for four years; but it was about a year later that he noticed a swelling behind the knee, which appeared suddenly and coincidently with some diminution of the swelling and discomfort in the knee-joint. The size of the swelling had varied according to the amount of walking undergone, but on the whole there had been a gradual increase of the swelling in the calf.

The condition on admission (as noted by Mr. Horrocks) was as follows:—The affected knee measures 14½ in. round the joint above the patella, and 14 in. below it; the sound knee measures 12⅞ in. round the joint above the patella, and 12½ in. below it. The fulness over the front of the affected thigh extends 3 in. above the upper border of the patella, and laterally is more marked on the inner than the outer aspect of the joint; the depressions on each side of the ligamentum patellæ are distinct, but the patella floats. Fluctuation is distinctly felt between the joint and the swelling in the calf, and *vice versâ*. On examining the back of the leg, a transverse oval swelling 4 in. across and 2½ in. from above downwards is seen in the upper part of the calf; above this there is a transverse depression, and higher again than this a smaller and more deeply situated oval swelling, and fluctuation can be obtained between this and the other swellings. The calf of the affected limb measures 13¾ in. in circumference at the most prominent part of the swelling, the measurement at the corresponding part of the sound limb being 11¾ in.

After a few days' rest in bed, on May 10th, under carbolic spray, the swelling in the calf was laid open freely, and about five or six ounces of thick synovial fluid were evacuated. (Before commencing the operation the knee-joint was firmly bandaged with a Martin's rubber bandage, so as to force the fluid from the joint into the calf, and to prevent the admission of air into the joint.) The sac wall was found to be very thin everywhere, except at its upper part, where it was constricted, and communicated by a narrow channel with the upper and more deeply situated sac; here the cyst wall was thick and wrinkled, looking like the mouth of a bag where it is tied. Through this narrow opening a director was pushed, and the opening was enlarged with a bistoury sufficiently to let out a small quantity of fluid and to permit exploration with the finger. The walls of this smaller cavity were thicker and rigid. The communication with the joint was not found; it was probably too sinuous. As much as possible of the walls of the lower and thinner sac were torn or dissected away; a large drainage-tube was fixed in the upper one. The lower half of the wound was stitched up; the upper half was freely swabbed with tincture of iodine. The limb was fixed on a modified Thomas's knee-splint, and the wound dressed with iodoform wool and Listerian dressings. Then the Martin's bandage was removed from the knee.

May 11th.—Dressings changed (under the spray); found fairly soaked with thin, synovia-like fluid, slightly blood-stained; no effusion in the joint.

15th.—Since the last note the patient has continued to do well; the lower part of the wound has healed. The large drainage-tube was removed to-day, and a smaller one substituted.

30th.—Wound nearly healed. Drainage-tube shortened.

June 13th.—Drainage-tube removed some days ago. Small superficial wound remaining.

By the end of the month the wound was quite healed, and a day or two later the man was allowed to get up. On July 24th he went home. The condition of the limb was most satisfactory; there was no swelling of the joint, and the slight stiffness resulting from the enforced fixing of the limb had almost passed away. At no period of the operation was there the slightest cause for any anxiety. Some months afterwards the man called at the hospital and reported himself to the house-surgeon as being quite well, and engaged at his ordinary work.

CASE 2. *Synovial Cyst in Popliteal Region; Operation; Successful result.*—J. K——, aged fifty-one, a commercial traveller, was admitted on March 3rd, 1885. He complained of weakness of the left knee. On examination a swelling of the size of a small Tangerine orange was found in the lower part of the popliteal space, slightly to the inner side of the median line. It did not pulsate; when the knee was flexed it disappeared, and on extension of the leg it stood out prominently and felt very tense. There was no redness or tenderness about it.

The limb was fixed on a Thomas's splint, and a succession of blisters over the swelling was tried; but as this seemed to have no marked effect, and as the patient became importunate for more active treatment, operation was decided upon. On April 30th the swelling was laid open thoroughly, under carbolic spray, and about an ounce of thin "calves'-foot jelly"-like material escaped.

The sac, which was very thin, was found to dip down between the heads of the gastrocnemius, and a probe was passed upwards some distance in the direction of the joint, with which, however, no communication could be proved. As much of the cyst wall as possible was stripped away, and a drainage-tube fixed in the deep part of the wound. The superficial part of the wound was stitched up, the iodoform wool and gauze dressings applied, and the limb fixed on a Thomas's splint. All went on well. On May 9th the drainage-tube was shortened, and a week later was removed altogether. By June 3rd the whole wound was soundly healed, and the man was walking about. He said that his knee felt rather stiff (probably from its long-continued position of full extension), but it was seen that he could freely flex it to a right angle. On June 7th the man went out well, and ready for work.

Remarks by Mr. PUZEY.—Of these two cases, in the latter there is some room for doubt as to whether any communication existed between the cyst and the joint; but the former was manifestly one of those to which Mr. Morrant Baker has specially drawn attention in the thirteenth and twenty-first volumes of St. Bartholomew's Hospital Reports, and it appears to me worth recording, because it illustrates many of the conclusions at which he arrived, and it shows how such cases may be treated without running much risk of the calamities which appear to have generally resulted from operative interference. In the case of T. W——, we have the history of two joints—the wrist and the knee—suffering severely from an attack of rheumatism, and never completely recovering from it. Then cystic swellings appear—in the case of the knee obviously, in the case of the wrist most probably, in connexion with the joint. An inspection of the interior of the popliteal swelling showed that it had originated at the back of the joint, and that later on this primary synovial cyst had forced an opening for itself apparently beneath the lower border of the popliteus, and then rapidly the secondary tumour had been formed, as shown by the thinness of the sac wall in every part except at its neck, where the walls of the canal were thick and corrugated, like the neck of a bag. Whether the primary cyst had originally been a bursa which communicated with the joint, or whether it was a true hernia of the synovial membrane, I cannot of course say; and from a surgical point of view it is not of much importance, although of interest pathologically. As may be seen by reference to the articles above referred to (especially pp. 258–261 of vol. xiii. of St. Bartholomew's Hospital Reports), post-mortem examination has not yet thrown much light on this point. But the very important practical question is—How should such cases be treated? The answer given by most authorities amounts to a strong recommendation to avoid any operative interference, and this seems justified by the many cases recorded (and how many more have probably been unrecorded?) in which loss of limb or life has resulted from such interference. But I think it will be found that in the majority of these cases the true nature of the affection has not been recognised in time, and due precautions have therefore not been taken. Several years ago I saw a young woman with a large fluid swelling in the upper part of the calf of one leg. I proposed to admit her into hospital, intending to operate antiseptically. I saw no more of her, but heard, some months after, that another surgeon had opened the swelling at her own home, and that she died in a few weeks. I was unable to ascertain particulars, but have no doubt as to what the nature of the swelling was, and very little as to the sequence of events. But surely antiseptic surgery gives us a freer hand; and although, perhaps, in the case of the well-to-do patient palliative treatment may answer all purposes, in that of the working-man we are justified in risking a little (after duly cautioning him) in view of obtaining a permanent cure. And as Professor Lister has shown us how the knee-joint itself will bear a clean-cut wound, so surely we may venture on a clean-cut wound and on antiseptic drainage of cavities connected with the joint. Paracentesis of such cysts can only be palliative; iodine and such-like injections would be destructive in their effects; and free drainage seems to me to be the only trustworthy means of permanently obliterating the cavity. The extreme tenuity of the cyst wall itself in these two cases leads me to think that it might be possible to bring about this result by forcibly pressing (with the palms of one or both hands) on the tumour, in such a manner as to force the fluid downwards against the weakest part of the sac wall, which might thus be freely torn through and the contents extravasated into the cellular tissue, thus avoiding any skin wound; and then, by well-arranged pressure and bandaging, absorption of the fluid might take place. Or by means of a long tenotomy knife, made to enter the sac at a long distance from the puncture in the skin, the sac wall might be freely opened and the same object gained. But where the Listerian method can be properly carried out I certainly should prefer the precision and thoroughness of open antiseptic drainage. With regard to the permanency of the cure in these two cases the question remains open, but I believe that if either of these men had had a return of his trouble he would have found his way back to me.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

Tumours of the Bladder.—Supra-pubic Cystotomy.—Fracture of the Head of the Radius complicated by Fracture of the Coronoid.

AN ordinary meeting of this Society was held on the 26th ult., Mr. Thomas Bryant, F.R.C.S., President, in the chair. Nearly the whole of the evening was occupied with the surgery of vesical tumours.

Sir H. THOMPSON contributed a paper on Tumours of the Bladder, in which he gave a brief sketch of six cases in which he operated during the last twelve months, showing the parts removed in each case. In three the supra-pubic operation was employed; in two the perineal incision only; and in one, that of a female, urethral dilatation was sufficient for the purpose. It may be added here that in two cases the result is without doubt a complete and permanent cure. In two others the disease, although known to be considerable, was more so than might have been expected from the preliminary examination, and death, in each case imminent, was in one certainly, perhaps in both, postponed for a short time. In each the operation was undertaken only with the view of palliating the patient's condition, not of saving him; removal of the growth, so far as this was possible, being the only mode of arresting severe and continuous hæmorrhage. The remaining two cases are of recent date, and it is only possible to say that the patients have thus far progressed satisfactorily.

Mr. BERNARD PITTS read a case of Supra-pubic Cystotomy two years after the removal of growth by perineal operation. The patient was a man aged forty-five. He began to have hæmorrhage from the bladder about three years before the first operation, or five years ago. When he first came under observation he was losing a large quantity of blood, his urine was very offensive, he was cachectic, and unable to follow his occupation. After operation and removal through the perineum of a pedunculated papilloma he regained his health, his urine became clear, and he saw no trace of blood in it for a year and a half. When examined in July last he was in good general health and actively engaged in his occupation as a watchmaker, but he had a constant deposit of blood and mucus in his urine, and was occasionally passing small clots; micturition was frequent and attended with some pain. In spite of treatment these symptoms continued, and on September 22nd a supra-pubic exploration was made, and it was found that at the site of the old pedicle—viz., just below the right ureter—there was a widely diffused recurrence; the growth was for the most part but slightly elevated, but there were several cone-like elevations of the size of the top of one's finger. These projecting buds were nipped off with forceps, and the broad base of the growth was scraped with a sharp spoon. A number of small sessile tufts were seen on the sides and base of the bladder, and were, as far as possible, removed with the spoon. The patient made a good recovery, and exactly one month after operation the bladder opening had entirely closed. He had lost all trace of blood in his urine, and all pain. The portions of growth removed were firm, and quite different in naked-eye appearance to what was removed on the first occasion. Microscopical examination showed the recurrent growth to be a papilloma, presenting, however, many changes of a suspicious character. The conclusion of the paper dealt with the probable future of the case, since

it was very likely that further operative interference would in time be necessary, and it was suggested that one should not be in a hurry to interfere in such a case because of slight return of symptoms, but that it would be better to wait until the patient was rendered unfit by hæmorrhage or exhaustion to follow his occupation; then to again open his bladder above the pubes, and to remove the growth as freely as possible, and if on examination the growth presented no further evidence of a malignant change to be content with this; but in case there was distinct evidence of change in the character of the growth, or if the growth was so luxuriant that successive operations failed to keep it in subjection, then it would seem right to give him a chance of prolonged life by diverting the ureters, and subsequently removing such parts of the bladder as necessity compelled. It was suggested that by an incision in the groin, as for ligature of the external iliac, the ureter might be reached, and ligated near the bladder, and the fore-end then brought to the surface; that after the wound had healed, and the kidney was accustomed to the change, the same operation should be done on the opposite side. The bladder would then be rendered a passive organ, and the growth within it could be dealt with through the supra-pubic opening, either by application of caustics or by stripping back the peritoneum as far as the attachment of the ureters, and then removing the greater part of the bladder, taking away the mucous coat from such part as from the connexions it might be inadvisable to otherwise meddle with.—Mr. JOHN CROFT related a case of flat epitheliomatous growth situate behind the trigone; the tumour could not be removed, but great relief followed the establishment of the perineal fistula, which was allowed to remain open for nine months, when the growth grew through the perineal wound; the hæmorrhage and dysuria ceased from the time of the perineal exploration. Another case occurred in a lady; it was a fimbriated growth. The urethra was dilated, and the whole growth was scraped away in fragments by the aid of the finger-nail. The hæmaturia had ceased, and had not returned, now four months since the operation.—Mr. THOMAS BRYANT felt that this operation was a great advance; but the founders of the Society would have regarded it as a rash innovation. Most of the cases were of the "rescued" kind. The average duration of life in tumour of the bladder would be an interesting item of information. He had operated on twelve cases, and all by the perineal section. One case ended fatally, probably because the supra-pubic method had not been employed. But perineal exploration ought first to be used. For the actual operation the supra-pubic method was probably to be preferred in most cases of extensive growth and near the fundus. If the tumour be small and situate at the base, the perineal section might be best for the removal of it. He gave illustrations of the principle that small tumours could produce severe symptoms. The case of a female child suffering from profuse hæmaturia was narrated, in which on withdrawing forcibly a sounding catheter the eyelet contained a papilloma which was torn away from the mucous membrane of the bladder. The child did well, and was healthy sixteen years later. In the case of a lady suffering from vesical spasm and hæmaturia, a small growth not larger than a haricot bean was found near the neck of the bladder; the tumour was easily removed and was a fimbriated papilloma. Eighteen months ago a man with vesical hæmorrhage was reduced to the last degree of anæmia; the bladder was explored through the perineum; the whole bladder appeared to be filled with villous growth. Sir Henry Thompson's forceps were used, and a great deal of the growth was removed; the bladder was scraped throughout, the walls being wiped rather roughly with a sponge on a holder. The man steadily recovered, and remained well for six months, when slight hæmaturia persisted for a week, but this never recurred. Another case of a calamitous kind occurred in a man in whose bladder a fibrous polypoid growth sprang from the fundus; this was seized and withdrawn. A second one was detected, but was not so easily removed; it was drawn into the perineal wound and snipped off. The man died of peritonitis, and a small hole was found in the bladder at the site of the removed polypus.—Mr. HENRY MORRIS had operated in five or six cases. The perineal section was performed in all. Of these only two were thought to justify further operation. In a case that had been one of vesical calculus, a prostatic tumour was discovered, and removed with Sir Henry Thompson's forceps two days later—as the tumour was unexpected at the time of the perineal exploration. In another case, that of a large hard tumour with nodulated surface, the size of a small orange it was found impossible to remove it through the perineal wound, and a supra-pubic opening was made. The two wounds were a great advantage in this operation; but it was impossible to remove the whole of the disease. Though the rectal bag was much inflated, it was surprising to find how little the bladder had been elevated, for a fold of peritonem still presented in making the parietal incision. The tumour extended from the ureter on one side up to the fundus on the same side. Would it be more advantageous to close the perineal or the supra-pubic wound for the purposes of drainage? He did not think that the suggestion made by Mr. Pitts was too adventurous. Draining the kidneys by turning the ureters away, and make urinary fistulæ either in the loin or groin, was scientific treatment on a par with the operation of lumbar colotomy for rectal obstruction. The little inconvenience of urinary fistulæ was illustrated by two cases.—Sir HENRY THOMPSON said that washing out by the catheter was not a certain method of diagnosis. The lithotrite might remove fragments suitable for diagnosis, but this should be done cautiously. He could not certainly diagnose a tumour in the bladder by means of the sound, as the papillomata were very soft and light; even with the finger in the rectum a certain diagnosis was not possible. The perineal opening was no disadvantage whatever, and should form the exploratory opening. He advised in his first paper that the surgeon should lay hold of nothing whilst the assistant is pressing down from the outside, lest the peritoneum be wounded. Had he been aware of what could be done by the supra-pubic method at that time he would not have used the perineal method for that case. Drainage afterwards through the supra-pubic wound was quite sufficient. He referred to the case of a man with very large prostatic growth, necessitating frequent catheterism and causing much exhaustion. A supra-pubic opening was made and a curved silver tube introduced; it was a perfect drain, and the patient still had a permanent opening and enjoyed existence. The urine drains away into a urinal which the patient wears. The suggestion by Mr. Pitts was a novelty well worth consideration. He was thankful for a suggestion thrown out by the President, that a new sponge tightly tied round a forceps was a method of clearing out an extensive villous growth.—Mr. PITTS said that he had perhaps prematurely come to the opinion that the supra-pubic operation was the best. There might be some cases that could be better treated by the perineal method.

Mr. B. WAINEWRIGHT read a paper on Vertical Fracture of the Head of the Right Radius and Fracture of the Coronoid Process of the Ulna, caused by a fall on the hand, in a man, a riveter by trade, producing great restriction of all the movements of the forearm and inability to follow his occupation. It was treated by excision of the head of the radius and removal of the fractured portion of the coronoid process of the ulna, resulting in greatly improved mobility of the forearm, and enabling him to resume his work.

After Mr. Butlin had exhibited a screen of drawings of Diseases of the Tongue the following living specimens were shown:—Dr. James Anderson: Intracranial Murmur with relapsing Optic Neuritis. Mr. Mansell Moullin: Complete cure of Gunshot Wound of the Foot. Dr. Beevor: Cases showing type of Paralysis resulting from pressure on fifth and sixth cervical roots. Dr. Hale White: Addison's Disease with Leucoplacia Buccalis.

MEDICAL SOCIETY OF LONDON.

Athetosis.—Congenital Dislocation of Patellæ.—Pes Gigas.—Erasion of Diseased Joints.—Dermatitis Herpetiformis.—Cystitis treated by Electricity.

A CLINICAL meeting of this Society was held on Monday last, Mr. R. Brudenell Carter, F.R.C.S., President, in the chair.

Dr. C. E. BEEVOR showed a case of Athetosis in a man aged twenty. There was a history of a convulsive fit at the age of thirteen, and loss of power on both sides. He gradually recovered power in the left side, but remained paralysed in the right leg and arm. Ever since the seizure he had suffered from epileptic fits, occurring about once a year.

The movements commenced in the right arm and hand only a year ago. Voluntary efforts increased the movements. The right hip-joint was dislocated—it was said as the result of the first fit. The right limbs were much shorter than the left. There was but little difference between the two sides of the face. The movements ceased during sleep. There is no mental defect, though his aspect and speech might suggest this. He has never been aphasic. Dr. Beevor considered that there was a cerebral lesion, but did not attempt to localise the lesion more precisely. Voluntary movements were possible with the right hand, though much interfered with by the involuntary athetosis.

Mr. HERBERT ALLINGHAM showed two cases of Congenital Dislocation of Patellæ; the quadriceps muscle was atrophied. The vastus internus in the boy shown did not respond to electrical reaction.—Mr. J. H. MORGAN was disposed to think that laxity of the internal lateral ligament was the chief cause of the displacement.—Mr. NOBLE SMITH had seen two cases.—Mr. F. B. JESSETT had met with one case.—Mr. W. H. BENNETT considered that infantile paralysis might lead to the dislocation, as he had seen in one case.—Mr. EDMUND OWEN thought that knock-knee might be a cause, in addition to congenital malformation and to infantile palsy.

Mr. H. ALLINGHAM showed a remarkable case of Pes Gigas. The hypertrophy appeared to affect only the anterior part of the foot, and involved the cellular tissue chiefly. The bones did not appear to be enlarged. There was no evidence of nævoid tissue in the hypertrophy, which probably involved the lymphatic and connective tissues.—Mr. DAVIES-COLLEY had recorded a somewhat similar case in the Pathological Transactions three years ago. The foot was amputated through the metatarsal bones. Billroth had pictured such cases in his Clinical Surgery.—Mr. W. H. BENNETT had treated a case of the kind by partial amputation, with very good result. There was some tissue that resembled myxoma.

Mr. EDMUND OWEN showed two cases of Chronic Suppurative Knee-joint Disease, treated by free removal of the diseased tissues. A flap was raised from the front of the joint, in which the patella was contained. The semilunar fibro-cartilages were removed, and the whole cavity rendered aseptic by injections and washings of corrosive sublimate. No local or constitutional disturbance followed the operation. There was ankylosis in each, and no shortening of the limbs.—Mr. F. B. JESSETT fully concurred in the treatment, which was less liable to be followed by severe accidents than resection, and it left no shortening.—Mr. DAVIES-COLLEY's experience of erasion of the knee-joint was not so favourable. In children he would prefer excision; the epiphysial lines need not always be interfered with.—Mr. BRUCE CLARKE had used the method in a boy in whom the disease was more chronic. A movable joint might be secured if the disease were treated early. A movable was preferable to an ankylosed joint.—Mr. W. H. BENNETT asked whether it should not be the aim of the surgeon to obtain a movable joint.—Mr. BENTON considered that bony ankylosis would not result; there was already some movement.

Dr. STEPHEN MACKENZIE showed a case of Dermatitis Herpetiformis in a man aged thirty-nine. He had a chancre at the age of twenty, but no secondaries. He had had no skin affection till last Boxing Day, when he drank freely and slept in a damp bed. Catarrhal symptoms followed. On Jan. 5th a vesicular eruption appeared on the face and neck. Some bullæ also came out on the arms, as well as erythema on the chest and arms. Where the erythema was there were no vesicles. Ever since January he had had the condition of hyperæmia, vesicles, and bullæ of variable severity. The erythema marginatum was very fugacious, but generally permanent. Duhring had described these cases as dermatitis herpetiformis. He drew attention to the multiplicity of the lesions. Erythema, vesicles, bullæ, and pustules were generally present in the same cases concurrently or consecutively, associated with small vesicles arranged in groups. In all the cases Duhring described (sixteen in number) there was much itching—whence the term pemphigus pruriginosus; but there was no pruritus in Dr. Mackenzie's case. Certainly, as Duhring stated, herpes gestationis was a variety of the same disease. A coloured drawing of a case of this kind in a pregnant woman was shown. Some of the cases described by Bazin and Tilbury Fox as hydroa were of the same nature. Impetigo herpetiformis of Hebra was always fatal, and probably not the same affection as dermatitis herpetiformis. The disease was very rebellious to treatment, but arsenic seemed to have some influence over it. Cold appeared to increase its severity. One case of Duhring's had lasted sixteen years. In reply to questions from Dr. Veale and Dr. C. T. Williams, he said there was no albuminuria and no glycosuria, and the reaction of the urine was natural.

Mr. BRUCE CLARKE showed a case of Cystitis, which was apparently benefited as the result of the application of the constant current for ten to twenty minutes once or more times a week. Benzoate of soda was given in large doses, and every other treatment carried out, including cystotomy.—Mr. E. OWEN considered that cystotomy would cure most cases of cystitis.—Dr. S. MACKENZIE asked whether salicylate of soda in large doses had been given.—Mr. SWINFORD EDWARDS asked whether the negative or the positive pole was introduced into the bladder, and whether the walls of this viscus were touched.—Dr. C. T. WILLIAMS asked how the electricity acted.—Mr. BRUCE CLARKE said he could give no satisfactory explanation.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

A Review of the Past Year, with some Reminiscences of Cholera and Tropical Fevers.

A MEETING of this Society was held on Wednesday, Nov. 10th, Dr. Walter Dickson, R.N., President, in the chair.

Dr. DICKSON, after thanking the Society for the honour of re-election, and congratulating it on its present flourishing condition and the work done last session, paid fitting tribute to the memory and scientific labours of the distinguished members whose loss they had to deplore during the past year—Dr. G. Milroy, Dr. T. S. Cobbold, and Dr. Varentrapp of Frankfort,—all of whom had for many years been connected with the Society. Dr. Dickson then proceeded to consider the epidemic of cholera which, beginning at Brindisi and Venice in the spring of this year, inflicted serious loss in several provinces of Italy, chiefly on the Adriatic Coast, and in the valley of the Po, but also extended to a few places on the west coast near Naples, and to Cagliari in the island of Sardinia. It subsequently spread to Istria and Hungary, but on the whole was much less destructive than former epidemics, the larger cities of Italy having escaped. A minor outbreak in the extreme corner of Brittany in the winter months reminded us that these visitations were not always associated with high temperature, and the report to the French Minister of Commerce showed conclusively how the disease spread from individual to individual, and village to village, in a group of small fishing ports in the department of Finisterre. The highest mortality was always coincident with the most defective sanitation, and in Audierne, with 1700 inhabitants, 400 cases occurred, and 144 deaths. Drunkards, and those who, while nursing the sick, took their meals in the bed-chamber, were especially observed to suffer. Although distinctly traced from one small town to another, its first appearance was variously ascribed to importation from a distance—from Brest or from Toulon, through sailors who had returned from Tonquin, or, as suggested by the Medical Commission of Inquiry, through fishermen returning from the coast of Spain, which was last year devastated by cholera. The troops stationed in the district did not suffer, their better hygienic condition protecting them from the disease. In Italy cholera is always regarded as introduced from without, and quarantine regulations are more confided in than sanitary precautions, involving trouble and expense. The relaxation of the old restrictions was deeply resented by the people, and the Government, though disposed to tread in the paths of this country in the matter of local sanitation, had to yield in some points to popular clamour. Some advance, therefore, has been made by the adoption of the five days' detention of ships and the abolition of land quarantine by the International Conference at Rome last year. In time, no doubt, the English idea of scrupulous universal cleanliness, as the best preventive of cholera and all other epidemic diseases, will obtain extended acceptance among the southern nations of Europe, which have recently so grievously suffered from their neglect of it. Dr. Buchanan's admirable summary of the argument was quoted, and merited praise given to the Local Government Board for their efforts to discover and correct sanitary defects

wherever they were reasonably suspected to exist. Dr. Koch's researches on cholera microbes and M. Pasteur's prophylactic inoculation for hydrophobia were to be regarded as valuable advances in epidemiological science, though still on their trial and requiring corroboration from further experience. Reference was made to the Peruvian verruga and the recent deplorable self-sacrifice of a young physician of Lima, who inoculated himself with the blood of a patient ill with the disease. After a period of incubation of twenty-three days he induced the disease, and died on the thirty-eighth day, showing that the malady, though strictly endemic, confined to a limited tract of country, and not necessarily contagious, is zymotic and inoculable, and possibly dependent on a bacillus, reported to have been discovered by Professor Izquierdo of Chili, circulating in the blood and provoking the local changes that mark the disease. In the last report of the health of the Royal Navy were found some interesting details of the etiology of the fevers which occurred to the force in the Soudan, Egypt, and Malta in the recent war, and which greatly raised the rate of sickness and mortality. On the west coast of Africa the cases of paroxysmal fevers of the climate appeared to have been of a mild type, although very numerous. In one vessel in the Niger, with seventy whites, all except six were affected by malarious fever, yet no death or invaliding had occurred. Only one case of yellow fever is recorded in the whole naval force (at Callao, in the Pacific), in a man who had slept on shore. Only five cases of cholera seem to have occurred in the whole force (all at Amoy, in China), and were traced to the free use of aerated water manufactured in the town from water polluted with sewage. The naval statistics show a portentous increase of venereal affections, chiefly on the home station. In the whole force absence from duty from this cause has amounted in the year to five days per man—a loss of time equal to that caused by all the zymotic, rheumatic, respiratory, and digestive diseases put together. On some foreign stations there had been a diminution of venereal disease in the navy owing to the salutary regulations enforced by the local authorities; and at the Cape of Good Hope a frightful extension of syphilis, affecting a large portion of the population, including many infants and young children, had led to a great change in public opinion; and the restrictive measures, which had been some years ago repealed by the colonial Legislature, have been again introduced, as absolutely necessary to avert further evil. The President then gave some of his own experiences in the navy in regard to cholera and kindred disorders in two instances, which, in the microcosm of a ship and the thorough knowledge of the persons affected, afforded good opportunity of studying etiology. In the first, a corvette with 200 men serving on the Baltic coast in the first year of the Russian war, the sanitary condition of the ship and crew were very defective, and much deteriorated by the arduous work of incessant cruising in cold, damp, tempestuous weather, blockading the enemy's ports and destroying his commerce. In the end of September, 1854, she captured several prizes, which were sent in care of seventy men into Memel, which had that summer been visited by cholera. A heavy gale drove the ship off the land and prevented communication with the prize crews for four days, during which they underwent much hardship and privation. When they returned on board, nearly all were found to be suffering from bowel-flux in various degrees of intensity, and two died of cholera—one in fifteen hours, the other with consecutive fever on the ninth day. A third case, in a man who had not been on shore, and was less severe, survived to the tenth day, and, in the final stage, had black vomit as well as rice-water evacuations. The men who had not been on shore were affected in far less proportion than those who had been with the prizes at Memel, of whom more than one-third suffered severely, and few of them escaped the minor form of the disease. The other example was of a frigate with 500 men, the flagship on the East India station, which, during eighteen months' service in India, Ceylon, and Arabia, had enjoyed a marvellous immunity from disease, and was in perfect hygienic condition when she arrived at Aden in March, 1859, after lying six months off Jeddah in the Red Sea. Leave to go on shore was given, Aden at that time being reputed healthy, although it was afterwards discovered that a few sporadic cases were occurring among the natives. A few cases of bowel complaints were found when they returned on board, and in three decided cholera was manifested, with two rapid deaths. The ship at once put to sea, and, thanks to her excellent internal economy, although several cases of diarrhœa occurred in the next few days, none attained choleraic intensity. Both instances show that in the cold bleak climate of Prussia, as well as in the intense dry heat of Arabia, much risk is run by communicating with cholera-stricken localities. Malarious fever was then discussed as it appeared on board a steam-sloop with 110 men, employed for three years (1850 to 1853) on the west coast of Africa in the suppression of the slave-trade. Minor forms of fever were not uncommon, but in the River Congo, where the vessel lay seven months, from one to three miles from the shore, it was found that while those who remained on board her scarcely suffered, the crews of the boats, which often ascended the river forty miles to search for slavers and lay near the banks, were much affected by terrestrial miasms, and a considerable portion, one-third of those so employed, contracted malarious fever. Some, who were natives of ague districts or had formerly had that disease, showed only the quotidian or tertian type of intermittent, but the majority were severe cases of remittent, with an average period of twelve days' incubation, exhibiting high pyrexia during the first week with only slight remissions, critical evacuations from the fourth to the seventh day of perspiration, or urine, or blood from the mucous membranes, and, although all recovered, their convalescence was exceedingly slow, with occasional relapses. Only one death occurred in a young officer, who had not been exposed in the boats, but was a man of intemperate habits, and died on the fourth day with black vomit and deeply jaundiced. Thus, from the same malarious poison in the Congo, arose in a few months the morbid processes of ague, remittent and yellow fever, due, it would seem, to the modifying influences of exposure, natural proclivity, and personal habits of the individuals. But two-thirds even of the boats' crews escaped unscathed, and those who remained on board the ship were nearly exempt. Only that one death from disease, and very the little invaliding, occurred during the whole commission of the ship, which was in perfect order, and the greatest care was taken by the commanding officers to mitigate as far as possible depression and discomfort inseparable from three years' sojourn on that dreary station. The last instance adduced by the President was that of a corvette with two hundred men, which lay in the river San Juan de Nicaragua, in Central America, and suffered from the malarious fever of the locality. This ship was in good sanitary condition, and the men had recently come from Europe. It was the hot rainy season, and 16 per cent. of the crew were laid up in nine weeks by various forms of malarious fever—one-half of the number sick showing the intermittent, the other half the remittent type. The disease here differed much from that observed in the river Congo and in Africa generally. Pyrexia, at the outset exceedingly high, was moderated in a few hours, persisted with remissions for one or two weeks, after which the patient rapidly recovered without the extreme debility and prolonged convalescence of African fever. One death only occurred, and that by a coincidence was also in the case of a young officer, intemperate in alcohol, who had been, moreover, on shore, and exposed to chill in heavy rain when overheated. Four days after he was seized with fever of the same character as the others; but on the third day he became delirious, with yellowness of the skin and black vomit, and so died, the fatal symptoms being probably induced or aggravated by chronic alcoholism. Bilious discolouration of the skin, of such grave import in tropical fevers, is of less moment in European epidemics. An outbreak of jaundice two winters ago at Bremen, in North Germany, was described as remarkable from its prevalence exclusively among men, its limitation in locality, its being non-febrile and non-fatal, and from its alleged connexion with revaccination, many of the jaundiced having been revaccinated a few months before. Catarrhal icterus has been lately ascribed to ptomaines absorbed from the alimentary canal acting on the liver. Some remarkable epidemics of jaundice had been quoted by the late Dr. Murchison, two of the last being that at Pavia, in Italy, and Rotherham, in Yorkshire, both of great severity. The light recently shed on several zymotic diseases affecting children by the observations of Drs. Ballard, Power, Cameron, Klein, and others, tracing such diseases to morbidly poisonous milk, is one of the chief medical events of the year. Those researches and the others undertaken in regard to the microbes suspected or proved to form an essential part of various morbid processes will afford interesting material for discussion in the Society.

ACADEMY OF MEDICINE IN IRELAND.

Liver with two Gall-bladders.—Perforation of Stomach.—Colloid Carcinoma of Stomach.—Fibroma of Cornea.

AT the opening meeting of the Pathological Section on Nov. 5th, the PRESIDENT delivered an introductory address.

Dr. PURSER exhibited a Liver with two Gall-bladders. The specimen was of some little interest from its rarity, though not exemplifying any great morphological law. It was taken from a girl aged eleven years, who was admitted into Sir Patrick Dun's Hospital extremely ill of scarlatina, which she had had for five days, and who died a few hours after her admission.

Dr. QUINLAN submitted a case of Perforation of the Stomach. On the 11th of October, at the request of Dr. Franks, he received into St. Vincent's Hospital a patient who was cook to a gentleman. She had been for many years subject to chronic disease of the stomach, with dyspepsia and constipation; and on the Wednesday before her death she took a very large dose of Epsom salts and senna. This dose had a very active effect, and was followed by great pain, which increased day by day, until, on the Friday night, it became unendurable. In her agony she crawled out of bed and knocked at the door of the head of the family, who with great humanity immediately sent for Dr. Franks. The latter, at half-past two o'clock in the morning, found the woman lying on her face, supported on her elbows and knees, and in very great agony. He found that the pain was localised to the left side of the epigastric region. There was no flatulent distension or pain on pressure. Her pulse was 110, and her temperature normal. Perceiving that it was a case of peritonitis, he applied morphia to keep down the pain. She got worse, and on the following Monday was received into St. Vincent's Hospital. Her abdomen was then greatly distended, but it was remarkable that pressure did not increase the pain. He (Dr. Quinlan) saw her immediately afterwards. She was in great agony; her temperature was 101·6°, her pulse 120, and her face had a pinched, collapsed look. He saw that the case would be fatal, and could only endeavour to relieve the pain by morphia. At 11.30 the house-surgeon found her free from pain and speaking calmly, and then she suddenly collapsed and died in a few minutes. On the following morning a post-mortem was made. Irrespective of the particular lesion, she was a healthy, well-nourished woman, her age being thirty-eight. The intestines were greatly distended with flatus, the contents of the stomach were effused into the peritoneum, and there had been very severe peritonitis. There was a perforation in the stomach at the middle of the lesser curvature. The coats of the stomach were red; and there were a number of patches of very severe congestion, looking like the effect of some irritant poison. He examined the grumous fluid in the stomach, but found no trace of antimony, arsenic, or any other poison. There was great thickening of the stomach throughout its entire contents, and considerable evidence of chronic disease. It was evident that the perforation and subsequent peritonitis had been produced by the action of the violent purgative.

Dr. KENDAL FRANKS exhibited the stomach, omentum, transverse colon, pancreas, and spleen of a man who died in the Adelaide Hospital of Colloid Carcinoma of the Stomach. He was only thirty-eight years of age. The history of the disease dated back eight months, when some pain in the epigastrium was first observed. A tumour was felt for the first time two months previously. Abdominal section was performed on Oct. 12th, but as it was evident that the tumour could not be removed the wound was closed. The patient died twelve days afterwards from exhausting diarrhœa, which set in a few days previously. The wound was firmly healed, and there was no evidence of peritonitis. The specimen showed the stomach walls enormously thickened, white externally, discoloured internally. The different layers of the walls were undistinguishable. The orifices were of normal size. The transverse colon behind was also the seat of colloid degeneration, but not to the same extent. The duodenum was healthy. The orifices of the stomach were scarcely altered in size. The pancreas and spleen were firmly adherent to the stomach, and seemed to be involved in the disease, but the liver was healthy. The great omentum presented a hard, nodulated, cancerous ridge at its junction with the stomach. Dr. Franks alluded to three cases presented to the Pathological Society by the late Dr. Stokes, and to drawings of them which Dr. Foot possessed. Microscopical sections, showing the colloid nature of the disease, were prepared by Dr. Bewley, and exhibited to the meeting.—Dr. FOOT said this was an uncommon form of carcinoma of the stomach, and he believed it to belong to a class which would never be successfully operated on, the reason being that an extensive and widespread infiltration of the pylorus, and sometimes as far as the œsophageal opening, preceded the formation of any tumour. In the cases represented by the three drawings which he laid before the Section, the stomachs were gradually diminished in size by growths projecting on the mucous surface towards the interior of the stomach; and in some of these cases the stomach was reduced to the size of the small intestine. According to Cruveilhier, the information about this form of cancer might be summed up under three heads—viz., first, it was the form of gastric carcinoma the local symptoms of which were the most obscure; secondly, it was the form in which the cachexia was least pronounced; and, thirdly, it was the form in which ulceration was rarest.

Dr. A. H. BENSON showed sections of a Fibrous Tumour which he had removed by dissection from the anterior surface of the apex of the Cornea of a girl aged nineteen, otherwise healthy. It had commenced near the apex of the cornea about three years previously, and had slowly grown in density and extent, without any past or present sign of inflammation in its neighbourhood. It was of a dense white colour, measured about 4 mm. in diameter and 1 mm. in thickness, and was raised above the surface of the surrounding cornea, with sharply-defined margin. Its surface was evenly covered by the corneal epithelium. When dissected off, the cornea under it was perfectly transparent and normal-looking. There was no vascularity in or about the tumour, or anywhere in the cornea; nor was there any history of such having been present at any time. The tumour commenced and grew painlessly. Microscopic examination showed it to consist of apparently normal corneal tissue, with cells and corpuscles. It seemed to be a case of true corneal tumour, though Alt, in his "Histologie des Auges," p. 40, states his disbelief in the occurrence of such. This tumour had nothing whatever to do with the limbus conjunctivæ or the episcleral tissue, the usual origin of so-called corneal tumours.—Mr. STORY asked if there were any bloodvessels in connexion with the tumour. It would be curious to find a tumour of such a character and in such a site without any vascular connexion.—Dr. PURSER remarked that Bowman, in his work on the parts concerned in operations on the eye, had figured a growth on the surface of the cornea consisting of papillæ. Perhaps Dr. Benson's tumour was of that character. From Dr. Benson's description he should imagine that the tumour consisted of papillæ growing on the surface of the cornea—in fact, it was like a wart on the surface of the cornea.—Dr. BENSON, in reply, said there were no bloodvessels in the tumour or cornea, or any opacity that might be the remains of bloodvessels previously existing, or any history of any previous condition of congestion of the eye which might have been the seat of vascular communication between the tumour and the margin of the cornea. The tumour was perfectly smooth and fine. There was no nodulation, or even bossing up of the central part of the cornea.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

A MEETING of this Society was held on Oct. 28th, Dr. Cleaver, President, in the chair.

Ophthalmic Cases.—Mr. SNELL introduced two patients. 1. Splinter of Steel removed from Lens Capsule by Electro-magnet. The man had been struck at his work five or six months ago, but only very recently sought advice on account of increasing impairment of vision, occasioned by opacity of lens. A coloured spot in the centre of the anterior capsule was presumed to be the splinter. Ten days since, on holding the electro-magnet in contact with the cornea for a little time, the fragment sprang forward to the posterior corneal surface. On his lying on the couch for removal, the splinter was nowhere visible, but on again applying the electro-magnet it once more came forward, and was then guided on to a convenient spot on the iris for removal, which was readily effected with the magnet, through a small corneal wound. The in-

complete cataract was left for subsequent treatment. The fragment weighed ·0001 gramme, and Mr. Snell stated that he had now removed about sixty pieces of steel or iron from various parts of the eye with his electro-magnet. 2. Paralysis of Internal Rectus from a blow over the eye with fist. The patient was a youth; the eye internally was uninjured, and at first ecchymosis was the only external symptom. Five days after the accident diplopia was noticed, and then the deficient action of the right internal rectus was distinct; three weeks after the injury the condition remained about the same. The direct cause of the condition was obscure; the blow was chiefly felt at the inner side of the eye, where there was tenderness. No evidence of rupture of muscle. Was the tendon crushed or torn, or was the branch of nerve similarly injured or interfered with by hæmorrhage?

Mediastinal Tumour.—Mr. PRIESTLEY exhibited a specimen of mediastinal growth in a patient of Dr. Dyson who had suffered from acute pneumonia. The growth consisted of a mass of caseating glands. The patient had a remarkable distribution of superficial arteries on his back, and the pulsation of the left subclavian could be felt below the left clavicle. Whilst under treatment the pneumonic symptoms were most prominent. The specimen was referred to the Pathological Committee to report upon.

Enlarged Spleen.—Dr. PORTER showed a large spleen from a case of splenic leukæmia. The patient had been under observation for nearly two years, and had presented the usual symptoms of progressive anæmia, emaciation, profuse sweats, epistaxis, great increase of white and diminution of red corpuscles in the blood, with great enlargement of the spleen and latterly of the liver, ascites, and some enlargement of the inguinal glands. The patient died of asthenia, hastened by hæmorrhages into the tissue of the mesentery and omentum, and excessive ascitic effusion, for which he was twice aspirated, with only temporary relief. Post mortem, besides the enlarged spleen, which consisted mostly of pulp and a large fatty liver, enlargement of the mesenteric and lumbar glands was found, and abundant lymphoid deposits in both mesentery and omentum.

Hydrophobia.—Dr. SIDNEY ROBERTS related a case of this disease occurring in a boy of five years under his care at the Public Hospital. The child was bitten on the thumb, which was at the time (half an hour after the bite) cauterised with nitrate of silver. Symptoms began on the forty-second day after the bite with restlessness and pain in the bitten part; on the forty-fifth he refused food and drink. He died on the forty-eighth day after the bite. Salivation was conspicuous by its absence thoughout the disease; there were no lyssi. Various remedies were administered, but chloroform inhalations was the only remedy that afforded temporary relief. An interesting point was that two other children were bitten by the same dog, one an hour and the other only five minutes previously. Both were sent to Pasteur fifty days after the bite and are now, eighty-three days after the bite, in robust health.

Pasteur's Treatment of Hydrophobia.—Dr. WHITE read a paper on this subject, founded on his observations made in a recent visit to Paris. He briefly adverted to Professor Pasteur's work in connexion with splenic fever in cattle, as illustrating the path which the great experimenter followed when he commenced the study of rabies, and related the facts which Pasteur had discovered in his study of the disease in animals—viz.: 1. That the nervous system is *par excellence* the seat of the rabies poison. 2. That the disease can be, with great certainty, transmitted through a long series of animals by trephining the skull, and introducing through the opening thus made a portion of rabid nerve tissue. 3. That passage of the poison through a series of rabbits intensifies it; and that a similar passage through a series of monkeys decreases its virulence. 4. That exposure of a highly virulent nerve tissue to the action of dry air decreases and finally destroys its virulence. 5. That if a dog be treated by inoculation with the attenuated virus of the monkey, or that from the rabbit, after prolonged exposure to air, it remains insusceptible to subsequent inoculations of the most intense virus of rabies. 6. That owing to the long period of incubation in dogs bitten by rabid dogs, it was possible to anticipate, and so avert, the advent of rabies in dogs already bitten by inoculating them with the attenuated virus. Dr. White claimed that Pasteur had demonstrated absolutely by the most rigorous tests his ability to protect dogs against rabies. Among Pasteur's patients who have been bitten by dogs whose rabid condition was ascertained, the mortality has been a little over ½ per cent. Dr. White described in detail the processes whereby the vaccines are prepared; and concluded his paper by reviewing the various theories which seem to shed light on the manner in which the body is protected from the poison of rabies by inoculation.—Mr. Walker, Mr. Favell, and Dr. Potter joined in the discussion.

Tumour of Stomach.—Mr. FAVELL exhibited this specimen from a middle-aged man who during life had suffered very little from stomach symptoms. He appeared only to have vomited once, and the pain experienced was relieved by eating. He suffered chiefly from bladder symptoms. The tumour was a large cauliflower-looking growth, and was found growing from the concave curvature of the stomach. The specimen was referred to the Pathological Committee to report upon.

Aseptic Surgery.—The PRESIDENT (Dr. Cleaver) gave an address on this subject, and laid particular stress upon the fact that many surgeons imagined they were practising aseptic surgery when in reality they were only treating with antiseptics, of which there were many methods, and all of them more or less imperfect; whereas in aseptic surgery there was only one method—viz., that introduced by Sir Joseph Lister, which aimed at and attained a complete absence of putrefaction, and is therefore designated aseptic. Another fatal error was that aseptic or Listerian surgery was spoken of as treatment by the spray; on the other hand, Sir J. Lister, in an address to the Surgical Section of the International Medical Congress in London in 1881, brought forward results of investigations he had made tending to show that the atmospheric dust is not nearly so much to be dreaded as we used to assume, and that the various forms of virus are far more likely to be introduced by contact with infected liquids or solids than from the air. Dr. Cleaver claimed as one of the results of aseptic surgery complete immunity from infectious disease, including pyæmia, septicæmia, erysipelas, and hospital gangrene. In upwards of 300 cases of major operations performed at the Sheffield Hospital for Children during the last few years, not a single case of these diseases had arisen.—Remarks were made by Mr. Pye-Smith, Mr. Jackson, Mr. Favell, Dr. Martin, Dr. Gwynne, Dr. Keeling, Mr. Garrard, and Mr. Knight.

MIDLAND MEDICAL SOCIETY.

AT the meeting of this Society on the 10th ult., Mr. Lloyd Owen, President, in the chair, the following specimens were shown:—

Borborygmi.—Mr. S. C. LAWRENCE showed a girl, aged eighteen, who for the last fifteen months had been subject to constant "borborygmi." These sounds were audible at a distance of some yards, and were synchronous with the respiratory movements; they ceased when she was asleep, lying down, or holding her breath. They had obstinately resisted all treatment, and were regarded as hysterical.

Dermoid Tumour of Ovary.—Dr. MALINS showed a dermoid cyst of the ovary that he had successfully removed from a patient aged fifty-one. It contained a large quantity of light-brown hair, a well-formed tooth, and some bony plates, besides much thick fluid.

Convergent Squint.—Mr. EALES showed a woman, aged twenty-two, suffering from complete paralysis of both external recti muscles. She consulted him on account of convergent strabismus, which the mother stated was noticed at birth, and had been present ever since. V = ⅓. H = ·50 dioptre; accommodation was good in each eye, and there was no other symptom present. She had no binocular vision, even for near objects. Division of the left internal rectus had gratified her by curing the obvious squint, but she had neither binocular vision nor was troubled with diplopia, though there was still some slight strabismus convergens.

Myxœdema.—Dr. SUCKLING showed a man aged forty suffering from myxœdema. He had been ailing for two years, complaining of debility and malaise. He presented the usual symptoms of myxœdema in a typical manner; the urine was free from albumen, of a low specific gravity, and deficient in urea. There was no reduplication of the heart sound, but feebleness of the circulation was a marked feature, the extremities always being cold, and the pulse small and of low tension; the temperature was 97·5 F.

Dr. SAUNDBY read a paper on the Treatment of Diabetes Mellitus.

Reviews and Notices of Books.

The Surgical Diseases of Children. By EDMUND OWEN, M.B., F.R.C.S. London: Cassell and Co. Pp. 518. 1885.

CASSELL'S "Clinical Manuals" have been so good and have established for themselves such a high standard that we now come to their criticism with rather exalted anticipations. It is perhaps on this account that we must plead to a feeling of disappointment in the volume before us; not that the volume is without merit, but that it is less meritorious than it might have been, seeing how its author had at his disposal the clinical and pathological records, statistics, and illustrations of the Hospital for Sick Children since its foundation—records &c. which in their special detail and excellence are probably not to be equalled at any other institution of the same kind.

Passing, however, from what is not to what is contained in this work, we would, in the first place, venture to regret the absence of all system in the arranagement of the matters discussed, and the very unequal attention bestowed on these matters. Let us glance at the Table of Contents. The Introductory Remarks are followed immediately by chapters on Diphtheria and on Tracheotomy. Would it not have been wiser to make the student acquainted with the diatheses of childhood, syphilis, rickets, scrofula, and the like—to teach him, in fact, something of the conditions which influence and modify disease and its treatment in young subjects—before discussing so vague and difficult a subject as diphtheria or tracheotomy? Further down this table we find a chapter on Nævus, followed by another on Empyema; then one on Burns and Scalds, followed by another on Infantile Paralysis. The chapter on the Genito-urinary Tract is cut short by those on the Rectum and Intestinal Obstruction, the Testis and its Coverings being then dealt with and followed by Hernia. It is impossible to conceive of any arrangement better calculated to render a difficult task more difficult for an author, or one more likely to puzzle a student, than this mixing up of subjects, which are neither clinically, pathologically, nor surgically associated.

Then, as regards individual subjects. The Introductory Remarks, consisting of some nine pages, discuss and dismiss a variety of subjects, such as the following: anæsthetics, temperature, pulse, tongue, proposed operations, scarlet fever, administration of medicines, leeches, poultices, and "how to bring up babies." If a book on the surgical diseases of children were wanted, surely such questions as the foregoing ought to have been dealt with in a more extended form, since they include much that makes children's diseases special. The paragraph on anæsthetics occupies barely eight lines. It is dogmatically stated that "chloroform is best adapted for the purpose": the reader is informed that "no painful operation or wearying examination should be conducted without the aid of an anæsthetic"; in other words, that chloroform must be constantly brought into use; yet there are no instructions as to its mode of administration, beyond that "at the Children's Hospital it is usually given on a piece of lint." A few hints as to the accidents likely to occur, and how to avoid them, might advantageously have been given. Even in empyema, where one lung is *hors de combat*, and the other not infrequently damaged, we find no caution enjoined: simply the statement "chloroform having been administered."

The chapter on Diphtheria includes a paragraph, with special heading, on "laryngismus stridulus." What the connexion may be we quite fail to perceive. Then chronic laryngitis, we are told, "is often the result of congenital syphilis. ..... It may be treated by a couple of leeches over the trachea." Several other alternatives mentioned "are all useful in various phases of the disease." Not only are these phases not described, but we are left in ignorance as to when or how to apply one remedy in preference to another. Why not have included chronic laryngitis under its asserted causation, and described it more fully?

Tracheotomy is dealt with in much the same casual way. It is illustrated with three woodcuts, one of which is Spencer Wells' compression forceps, now so well known as not to require illustration; another is an old-fashioned tapering Fuller's bivalve cannula with a rigid neck-plate. This form of cannula, occasionally useful in an emergency, is here recommended for general use. As regards size, we are told that "for small children the lumen of the outer tube, at the level of the plate, may be about the size of an ordinary steel penholder, and for larger children of the size of a cedar pencil." These instructions are somewhat vague; in a subject of such moment they might even be more severely characterised. This chapter (on tracheotomy) closes with a paragraph on "papillomata of the larynx," consisting of fifteen lines for history, diagnosis, and treatment.

In considering the Diatheses of Childhood, the author introduces a condition we have not yet heard of in this connexion—"children out of condition"; but the half-page devoted to it contains nothing which, in our opinion, justifies its removal from the place usually assigned to the subject—viz., the introductory remarks or chapter.

Among the symptoms of Congenital Syphilis we meet with the following dogma: "An eczema which extends up the abdomen and down the lower part of the thighs—that is, beyond the region enclosed in the napkins—is of syphilitic origin." Visceral syphilis is not even mentioned. A coloured drawing representing condylomata, and referred to in this chapter, will be found (owing, doubtless, to careless editing) many pages further on among rachitic deformities. We cannot commend this drawing; the mucous patches are usually broader, larger, and less elevated than here represented; as shown, they look like warts, and might well serve for contagious molluscum, and be less likely to mislead.

Rickets is discussed chiefly as if it were a disorder of the bones, first under diatheses, and further on under rachitic deformities. But neither this subject nor syphilis is treated in the orderly manner we should have expected in the special work before us; the author does not attempt anything like a chronological sequence of the manifestations of these diseases as they occur at various ages, from infancy onwards.

Concerning Strumous Glands, we read: "A common cause of enlargement is irritation of the pharyngeal mucous membrane by *sewer gas*." After relating how the children of three distinct families, one of which "was markedly strumous," got cervical abscess after exposure to sewer gas, the author says, "The use of the word struma must not be made a scapegoat in an endeavour to explain the occurrence of glandular enlargements when no other source of irritation happens to be discoverable." While agreeing generally with this caution, we venture to claim an equal indulgence for "sewer gas" under like circumstances.

In discussing the treatment of Empyema, the author says, "The site recommended for the opening of the pleural abscess is the fifth intercostal space, at the junction of the anterior third with the posterior two-thirds." This spot may be very well when the abscess cavity happens to be seated here, or even when there is an abscess occupying the whole or a considerable part of the chest; but we do not think the fifth space quite the best, and prefer the sixth. We also differ in regard to the exact part of the space for the opening; the junction of the anterior third with the posterior two-thirds is, we think, too far forwards for satisfactory draining in the recumbent position, and places the opening too high up even in the above-named class of cases. The author's method of operating is stated to be as follows: "An exploratory puncture at the selected

spot is made with a fine trocar and cannula, and a grooved director is passed along the track into the pleural cavity. Along the groove a probe-pointed bistoury is then thrust, and an incision about an inch in length is made through the space. The incision is subsequently enlarged by thrusting in the end of the finger, and working it along between the ribs." To say nothing of the difficulty of such a proceeding, is it well to recommend a student to thrust in the end of his finger, and work it along between the ribs in order to enlarge an incision? Would he not find a sharp scalpel far more to the purpose? Mr. Parker is said to have invented a useful double drainage-tube, illustrated in a woodcut. We believe it would be more correct to credit Mr. Scott Battams with this invention, which from experience we can speak highly of.

A propos of the diagnosis of Spinal Caries, we are told that if a child prefers a cautious descent downstairs by the aid of the balusters, and refuses "to jump from the bottom step," the diagnosis is clear. Does the author really offer this as a serious statement in a book written largely for students?

With regard to the chapter on Fractures, the book would have lost nothing had it been left out. On the other hand, a systematic account of the anatomy of the epiphyses at various ages, and of the injuries and diseases to which they are liable, would have greatly enhanced its value, and indeed should have been regarded as a *sine quâ non* in a surgical work on children's diseases.

Our perusal of other chapters brings us face to face with the same want of thoroughness—the same want of system in the treatment of the subjects discussed. Why not have abstracted some typical histories from the hospital note-books, instead of giving quotations first from one writer, then from another, often without any indication of what the author himself thinks best? Some of the chapters commence with a paragraph on the development of the organs under consideration, but this is so brief that it quite fails in its object. So, too, with the illustrations—they are not sufficiently obvious. Take for instance Fig. 21, representing the Development of Face. "Quain's Anatomy" is almost essential to make its bearing quite clear to the student.

We will now close this notice—not because we have exhausted the points open to criticism, but because we have said enough to justify the disappointment which we admitted to have felt in first glancing through the book. This feeling has increased rather than otherwise as we have more carefully studied the chapters. If the author will only take our criticisms kindly to heart, he will set about a reconstruction of his book and a re-writing of his chapters such as will ensure a really useful work when the second edition is called for. Should such a course be taken, our criticisms will have fulfilled the object we aim at in respectfully offering them.

The Member, the Fellow, and the Franchise. By JOHN ERIC ERICHSEN, F.R.C.S., F.R.S., Surgeon Extraordinary to Her Majesty the Queen, &c. London: H. K. Lewis. 1886. pp. 16.

THE present pamphlet is a somewhat amplified edition of the speech its author delivered at the College of Surgeons on Nov. 4th at the general meeting. We must pass over the opening paragraphs, without, however, on that account, be it said, endorsing the author's eulogy of the College of Surgeons, many of these statements being as visionary as the "vastness of its acquired wealth," to which allusion is made in proof of the wisdom and excellence of the policy hitherto pursued by the Council.

Considerable stress is laid on the fact that Licentiates of the College of Physicians and of the Apothecaries' Society have no status beyond their licence to practise; it is argued that the Members of the College of Surgeons stand exactly on the same level, and therefore should also have none. We must remind Mr. Erichsen that the College of Surgeons bestows not a mere licence to practise, but Membership of the body corporate; that this Membership is a survival of the ancient privileges formerly enjoyed (and enjoyed by all alike) by those who belonged to the corporation, and that to interpret the full meaning of this term we must go back to the origin and growth of the College. Let those who are interested in the matter refer to our columns of Oct. 30th, where a brief *résumé* of the history of the College will be found.

Mr. Erichsen's contention that the Members are not at present entitled to electoral privileges is indisputable; he is wrong in saying that Members urge a legal claim. On the contrary, they urge a claim similar to that put forth in 1843, when, as a result of this claim, the Fellowship was instituted, and they have now an equal right at least to do so. The Members, who in and after 1843 by the new Charter were elected Fellows, stood exactly on the same footing as regards their legal claim as do the Members of to-day. But whereas in 1843 a very limited number of the Members were made eligible for the electoral privilege, it is now sought to do justice to all alike, and to confer the electoral franchise on all Members of a certain standing.

Mr. Erichsen states that the business of the College is not political, not ethical, and not commercial. In the sense that the College cannot exercise any political influence, that it attempts but little ethical control over its Members, and that it does not conduct its affairs on ordinary commercial lines, this statement is strictly true. Whether, however, this is as it should be, is quite another question.

We are told that the business of the College is educational and scientific, and "that the supervision of surgical education and the conduct of those examinations by which it is controlled can only be efficiently done by men who are thoroughly trained to that sort of work." The author proceeds, "probably at least 1000 (of the 1140) Fellows are general practitioners." It therefore follows that he would practically limit the management of the College to the remaining 140; in other words, Mr. Erichsen would re-establish the monopoly which the institution of the Fellowship, it was hoped, would put an end to. Provincial Fellows will do well to note this argument. With the exception of some 140 favoured Fellows none are fit to participate in College concerns. By "favoured" we mean of course London Fellows, for the Council have, until quite recently, insisted on personal voting, which practically shuts out the majority of provincial Fellows from an expression of their views. Mr. Erichsen knows "of only one teacher of anatomy of any distinction who is not a Fellow." Are there not two at least at University College? He need only turn his eyes to other schools in order to convince himself how unjust this remark is to men of great distinction as anatomists, not in London only, but in Edinburgh, Aberdeen, Glasgow, and other places. Has he forgotten such men as Huxley, W. K. Parker, Ward, and a host of others? On this showing is it not strange that the Fellowship is not a necessary qualification for the "endowed lectureships," of which Mr. Erichsen speaks so enthusiastically in the early part of his pamphlet?

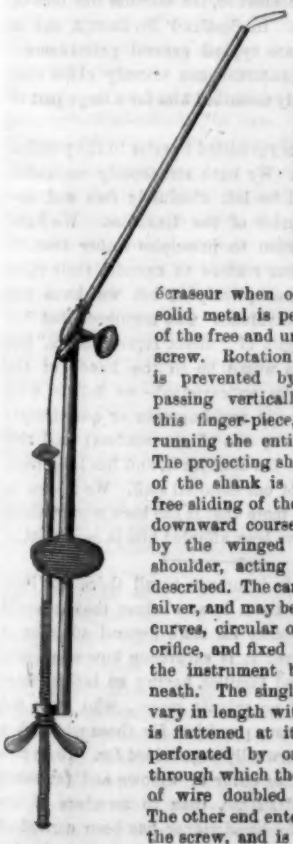
Mr. Erichsen would further support the *status quo* by appealing to the scientific acquirements of many members of Council. "Where are to be found the men of science connected with the College of Surgeons? Are they amongst its Fellows or in the ranks of its Members?" he asks. Gauged by the test of the "coveted distinction of the F.R.S.," Mr. Erichsen implies that Fellows only obtain it, and yet the very first name mentioned in this connexion is that of Sir James Paget. Now Sir James Paget, of all living men, is about the best instance of what can be accomplished without the academic test on which Mr. Erichsen lays so much stress. For Sir James is a Fellow by election and not by examination; like all the *elected* Fellows, therefore, his position is that of a Member as regards examination tests, while his status and privileges are those of the higher grade. A glance at the College Register reveals that Owen, Quain, Busk, Hewett, Birkett, Simon, Bowman, Spencer Wells, Humphry, and many others are Fellows by *election* and *not by examination*.

These are names to be proud of, and are, and will remain, evidences of how much depends on the man, how little on the mere examination test, and will serve to show that the highest scientific attainments and reputation in no way depend on the Fellowship of the College by examination, to which Mr. Erichsen attaches such an undue importance.

New Inventions.

AN IMPROVED NASAL ÉCRASEUR.

SIMPLICITY of construction, lightness combined with strength, and durability, are the essentials of a good nasal polypus snare. The rapidity with which the steel wire loop may be adjusted to the instrument should also be considered in the selection of a snare. The accompanying woodcut is intended to represent an appliance for which all the above advantages are claimed. This snare-écraseur may be described as consisting of four parts. The main body or shank has inserted at its angle a grooved wheel or pulley. A screw runs parallel with the shank, with a winged milled nut at its lower end; a cannula and a single steel wire loop drawer. The body of the instrument is constructed of steel of a superior quality, and is provided with the grooved wheel before referred to at its upper extremity, a finger-piece at or about its middle, and a projecting shoulder at its lower end. Over this revolving wheel the steel wire loop drawer passes, thereby reducing to a minimum the friction and loss of power that would otherwise be considerable. The finger-piece is one with the shank, and is intended for securely holding the écraseur when operating. This piece of solid metal is perforated so as to allow of the free and unimpeded passage of the screw. Rotation of the latter on its axis is prevented by a small steel point passing vertically downwards through this finger-piece, and entering a slot running the entire length of the screw. The projecting shoulder at the lower end of the shank is also perforated for the free sliding of the screw in its upward or downward course. Traction is obtained by the winged nut, external to the shoulder, acting on the screw already described. The cannula is made of German silver, and may be of varying lengths and curves, circular or flattened at its nasal orifice, and fixed to the body or shank of the instrument by a set screw underneath. The single wire loop-drawer will vary in length with that of the cannula, is flattened at its free extremity, and perforated by one or more openings, through which the ends of a small piece of wire doubled into a loop are fixed. The other end enters the nearest point of the screw, and is secured by a set screw on its side. A pear-shaped extremity is brazed to the screw end of the wire to lessen the liability to slip when undergoing a severe strain. When the winged nut is worked up the screw, the latter is drawn backwards, pulling the single wire loop-drawer and its attached loop further into the cannula, and thus the growth or hypertrophy is snared with expedition and with but little effort. The snare as described possesses all the power of the straight instrument, with the additional advantage that the operator's hand is out of his line of vision. The grooved wheel or pulley was applied by the writer for the first time in the history of nasal snares to a modification of Wilde's original model in common use in Germany. This instrument (Krause's) differs from the snare ordinarily employed in Germany and Austria in having the single wire loop-drawer (*Drahtstange*) substituted for the long wire loop. In justice to Dr. Sajous of Philadelphia it must be stated that he introduced the same principle of attaching a short length of wire loop to a single rod or stile in his straight snare écraseur several years ago. The advantage of this method of attachment is that the rotation of a short loop on its axis is much less likely to occur than in a loop of greater length. The original of the instrument illustrated was made to order by H. Pfau, Dorotheenstrasse 67, Berlin. Messrs. Maw, Son, and Thompson, of Aldersgate-street, are prepared to supply the écraseur as described.



GEORGE W. MAJOR, M.D. Montreal.

TENNIS ELBOW-CAP.

MESSRS. POPE and PLANTE, of Waterloo-place, have brought out a cap for the elbow in cases where the muscular parts about the joint have been overworked at tennis. It is composed of cotton or silk elastic, which completely surrounds the arm, extending for some distance above and below the joint, the part below being strengthened by a band one inch and a half below the joint. They recommend its use when the arm is recovering from a strain, and there is no prolonged return of tenderness or of pain on lifting a weight of about four pounds. It is only to be used during gentle play. Our experience of its use is that whilst it affords relief and support to the part, it also produces discomfort of the arm below from obstruction to the superficial veins, congestion rapidly following the frequent movements of the forearm, accompanied by a feeling of fulness and heat if the cap is too tight. Accurate measurement is required. It is called the Cavendish Elbow-cap.

THE METROPOLITAN INFIRMARIES.

AT a meeting of the medical superintendents of the metropolitan infirmaries, held at the Lambeth Infirmary on Nov. 25th, Dr. Lloyd in the chair, the following resolutions were agreed to:—

1. Moved by Dr. Saville, and seconded by Dr. Webster,—"That, in view of the differentiation into departments which the science of medicine has undergone of recent years, the opinion of the boards of guardians be obtained as to the desirability of appointing specialists of eminence as honorary consultants to Poor-law infirmaries, who shall be available for consultation with the medical superintendents; such consultants not to have any power in the administration of these institutions, as set forth in the regulations now in existence at the various metropolitan infirmaries. And that a copy of this resolution be forwarded to the medical superintendent of each metropolitan infirmary."

2. Moved by Dr. Webster, and seconded by Dr. Lund,—"That it is desirable that an increased medical staff be provided in the metropolitan infirmaries, in the form of a resident qualified clinical assistant (with board and lodging), in addition to the medical superintendent; but that such clinical assistant should not supplant the present assistant medical officer."

It was further agreed that these resolutions stand adjourned for further consideration at a meeting to be held on Saturday, Dec. 4th.

THE LANCET.

LONDON: SATURDAY, DECEMBER 4, 1886.

WE announced in our second edition, published on Friday last at 5 P.M., that Mr. WHEELHOUSE, Sir WALTER FOSTER, and Dr. GLOVER had been elected the direct representatives for England and Wales to the General Medical Council, with the actual numbers polled by each; thus the anxiously expected result was known throughout England and Wales on Saturday morning. There can be no need of any apology for again referring to this election, the great importance of which we have more than once impressed upon our readers, not only with regard to the choice of candidates, but even more as an indication of the public spirit in the profession, and of its interest in and appreciation of direct representation on the General Medical Council. Many prophecies have been indulged in, some hopeful, others adverse; but we doubt if anyone ever dared to foretell that so large a number as 13,381 in England alone would vote when the total on the Register is 18,074. Yet this is the fact. A poll of one-half of the Register would have been a success, but a poll of over two-thirds is such an unlooked-for response to the trust that Parliament has reposed in the profession that it ought to silence once and for all those who affect to believe that direct representation was a "cry" got up by interested parties, and was in no sense a genuine and strongly felt need of the profession. The result has conclusively shown a remarkably general and widespread interest in the election.

Another matter which fairly calls for praise is the mode in which the election has been carried out. Opinions will no doubt, differ as to the conduct of different candidates and committees, but when we bear in mind the suddenness with which the election came upon the great body of practitioners, the entire lack of experience of similar electoral contests, the widely distributed electorate, and the other obvious difficulties in the management of a canvass, the features of the election, on the whole, must be regarded as satisfactory. It is also satisfactory to learn that those elected have been returned by very substantial majorities over the other candidates. If we look at the poll for England and Wales, we find that Mr. WHEELHOUSE received a vote from very nearly one-half of the entire body of electors; and that Dr. GLOVER, who was supported by a full third of those entitled to vote, has a majority of nearly 2000 over the candidate who stands next to him on the poll. With so many candidates for the three seats the results might have been very different, and it is certainly a great advantage for those who will speak with unique authority at the Council to know that they have been supported by the great body of the profession in general, and that they do not owe their election to small majorities. Like all minorities, those defeated will not look upon the verdict as irrevocable, but will endeavour at a future time to turn their minorities into majorities. If they succeed in this, we hope that their success will be as decided as is that of those who have been returned on this occasion.

We have all along contended that it was most important that those who were returned as the direct representatives should be really such, and not men of the same interests as those already having seats on the Council. We rejoice to see that this principle has been largely successful. In England all three of the members will, we believe, represent the wants and aspirations of the general practitioners of medicine. By their wide acquaintance with the profession in all its branches, by their public action and well-known sympathies, they have shown themselves well able to represent the thousands whose votes have placed them at the head of the poll. In Scotland the same may be heartily said of the return of Dr. BRUCE over the head of a candidate whose connexion with a corporation was too close to enable him to represent the general practitioners of Scotland. In Ireland alone has this principle been completely disregarded by the majority. Not only is Dr. KIDD, the successful candidate, a member of the Council of the College of Surgeons, and an ex-president of that body, but his return keeps the representation of the entire profession in Ireland—corporate and otherwise—in the hands of Dublin men. This is undoubtedly a pity, and ought to be corrected whenever the opportunity for it arises. So far as the return of actual general practitioners is concerned, the election has been in some measure a success. In Scotland Dr. BRUCE, and in England Dr. GLOVER, are typical general practitioners; and although Mr. WHEELHOUSE can scarcely claim that title now, it certainly fitly described him for a large part of his honourable career.

In one word we may be permitted to refer to the position taken by THE LANCET. We have strenuously contended that the electors should be left absolutely free and unhampered in their exercise of the franchise. We have repeatedly drawn attention to principles rather than to men; we have urged our readers to exercise their right in accordance with these principles, but we have not pressed the claims of individuals. One argument that has been used against the gift of "direct representation" has been that the elections would be in the hands of the medical press. We have endeavoured—we believe with success—not to interfere in any improper or questionable way with the vote of any one of our readers; and this in spite of the fact that Dr. GLOVER is, and has long been, a very valued member of our editorial staff. We rejoice in his success, and all the more that it has been won without the aid which might have been afforded him in our columns.

THE importance of life insurance to all those who have others dependent upon them is so obvious that it would seem superfluous to advocate its more general adoption at the present time; and yet it is surprising how many men there are with wives and families, having an income more or less precarious, and no private means, who have not made this almost necessary provision for those whom they might at any time leave wholly unprovided for. To no men do more harrowing scenes occur of widows and fatherless children left utterly destitute, than to members of the medical profession. The breadwinner has been carried off at the end it may be of a long illness, and after the due discharge of all outstanding bills and funeral expenses there is found to be no policy of insurance, and nothing left save

household furniture. It is well indeed if matters are not worse than this, and the unfortunate widow left with debts to be paid. One would naturally have expected that with these harrowing sights in recollection all such members of our profession as are wholly dependent upon it for the support of themselves, their wives, and families, would have taken the precaution of having a policy in one of the many well-established life offices, which are not only willing, but anxious, to increase the number of their "assured," always provided that the lives are fair average ones. But, as any one who reads this may ascertain by inquiry among his friends, medical or lay, life insurance is still very far from being so general as it should be. If such persons are asked why they have not become policy-holders, various reasons are assigned. For example, one probable, and apparently logical, reason will be that the person questioned does not see the advantage of life insurance, since, if he should live to a good old age, his relatives will only receive what he has probably paid in premiums. This objection is easily answered. Life assurance is a provision against the uncertainty of life, and although medical applicants are, *cæteris paribus*, accepted as good lives, in no profession is the uncertainty of life more plainly illustrated than in that of medicine. Instances might be given and multiplied, but it is sufficient to say that every office could adduce cases where the sum insured has been paid within a very short period after the policy has been issued, and where only one premium has been paid. But should the applicant live to a good old age, has he done wisely in insuring? Undoubtedly he has. If as is now usual, he insure with profits, and in a well-established office the policy will increase in value each succeeding year, and may become double the original amount. In either case therefore the taking out of a policy of insurance on his life is to every medical man a good investment, and every medical practitioner would do well to insure against accident whereby he may receive a weekly sum in case of total or partial disablement, while in the event of a fatal accident his relatives will receive the capital sum. A more general adoption of these wise—might we not say necessary?—provisions for the future would render unnecessary most of those heart-rending appeals for the widows and orphans of medical men which appear so often in our columns, and those of our contemporaries.

An excellent means of promoting life insurance is by parents insuring their sons' lives as soon as they are insurable, say, at the age of fifteen. The premiums are low and remain so, and when the assured is old enough to take up the policy, he may be said to have, owing to the wise provision of his father, a small capital or estate to dispose of. Should he unfortunately never reach "man's estate," but die young, there is the capital sum to leave to parents, brothers, or sisters, instead of being wholly dependent upon them. And, like all other measures taken out in an honest spirit, life insurance brings good in its train. It inculcates habits of thrift and prudence; it compels a man to save up at least a portion of his income for others; and it affords great relief from the otherwise harassing care which must weigh upon everyone who thinks upon what will happen when he is gone, and how loved ones will be comfortably provided for.

FURTHER communications have been made to the Académie des Sciences by M. GUIDO TIZZONI on the pathology of the suprarenal capsules. The last paper deals with the functional and structural alterations that occur in the nervous system after the extirpation of these organs. The functional derangements have been observed in five rabbits operated on after the following manner. In one rabbit both suprarenal capsules had been removed fifteen months; in another the right capsule had been extirpated twenty-four days and the left six; in the remaining three animals the right capsule only had been excised nine, eighteen, and twenty-two months respectively. The lesions of the capsules were proved in seven animals; the five above mentioned and two others were killed at the end of nine and twelve months respectively, without having shown the least sign of functional disturbance. The nervous symptoms appear to be related to the brain and medulla oblongata. The animal moved with less ease and refused nourishment; soon it became comatose, spread its legs to prevent its falling, and dropped its head; it was seized with trembling and a tendency to be propelled forwards; mere touching excited a transient opisthotonos, or jerking and exaggerated movements; convulsive seizures, opisthotonos, and violent spasms preceded death. There was also diminution of mobility and sensibility (to pain and electrical excitation) and reflex action, especially in the anterior extremities; mydriasis, acceleration of respiration during the spasms, slowing of the same during the intervals, redness of the buccal mucous membrane, lowering of temperature, and finally rapid rigor mortis. The lesions observed were great injection of vessels in the central nervous system, and hæmorrhagic foci in the grey matter of the cord about the anterior horns and neighbourhood of the central canal, if death occurred soon after the operation. When death follows the operation at a longer interval the lesions are found in the pia mater and subarachnoid space, in the cavities and ventricular walls. There is an exudation with fibrous reticulum in the subarachnoid space, which contains also an amorphous, granular substance, rich in white cells and droplets of myelin. Branched villous outgrowths fill a large part of the ventricular cavities, which are also the seat of an exudation still richer in formed elements than that in the subarachnoid space. The leucocytal infiltration may be followed into the substance of the brain and cerebellum, where foci of cells and fibres have been destroyed and the epithelium of the cavity shed. These lesions correspond in distribution to the pia mater, and affect a limited layer at the surface of the hemispheres or at the interior of the ventricles; but there are, besides, disseminated plaques of degeneration, with, at the same time, infiltration of the spinal cord, and acute softening, commencing in the axial part of the nerve fibres and extending thence to the sheath. In the ependyma an exudation is found—sometimes of simple sort, sometimes attended with loss of epithelium and infiltration of the grey matter, penetration of leucocytes into the vascular walls, and disorganisation of the same; in fine, extension, either uniform or focal, of the morbid process into the grey matter, which may be replaced by globular masses or an amyloid substance. The same lesions are found in the walls and cavity of the fourth ventricle; the nerve nuclei of the bulb do not escape, and their cells are destroyed by pericellular dropsy, infiltration, and dystrophy, the result of the vascular lesion. The intensity of the

changes diminishes from above downwards, and attains its maximum (*sic*) at the seat of the second and third dorsal pair. Roots, ganglia, and nerves may be also totally or partially degenerated. In the two cases where no lesions were found the posterior part of the cord was alone preserved, that which generally remains normal. These alterations are probably due primarily to vascular lesions, which in the acute cases lead to hæmorrhages, and in the more chronic ones to alteration of the cerebro-spinal fluid. This opinion is strengthened, TIZZONI believes, by the fact demonstrated by his former experiments (see THE LANCET, vol. ii. 1884, p. 549), that suprarenal regeneration takes its point of departure in the solar plexus; also by the analogy between the nervous lesions and those of the skin which NOTHNAGEL has shown to affect primarily the vessels of the cutis; and, finally, by the great resemblance between the disturbances observed by BROWN-SÉQUARD soon after extirpation of the organs, and those which TIZZONI has observed later. Two cases described by BURRESI and SEMMOLA demonstrate the occurrence of nervous disorders in man, like those which TIZZONI has described in rabbits, as the result of disease of the adrenal organs.

WE understand that a deputation from the Committee for promoting a Teaching University in London has waited on the Senate of the University of London, has laid the views of those interested in the success of such a university before the members of the Senate, and has received a satisfactory reply. We are glad to find that this movement is again being brought into notice, but fail to see how, after Sir J. PAGET'S remarks at Manchester, any common line of action between the proposed and the existing Universities can be arrived at; moreover, we doubt if the Vice-Chancellor went further than to suggest, with his well-known courtesy, that every consideration should be given to the proposals of the deputation. Some internal reforms in the present University, such as the formation of a Board of Studies, as a means of communication between the teachers and the Senate, and perhaps a reconstitution of the Senate so as to give increased representation thereon to the teachers in the two large London Colleges, may be effected by this movement; but this will not satisfy the general body of its supporters, who demand a real Teaching University. A paragraph in *The Times* of Monday last showed how intense this feeling is among certain of the London teachers, and were it not for the evidence it afforded of the eager craving existing for some solution of our present difficulty, would have been sufficiently grotesque. The Victoria University, in order to provide for the affiliation of the Yorkshire College of Science, or any new college that may be successfully started in the North of England, has a clause in its Charter by which "any incorporated College may be admitted as a College in the University, on the University Court being satisfied, (first) that the College applying has established a reasonably complete curriculum, and possesses a reasonably sufficient teaching staff in the departments of Arts and Sciences at least; (secondly) that the means and appliances of the College for its teaching are established on a sound basis; and (thirdly) that the College is under the independent control of its own governing body." Power is further given in case of a refusal, for an appeal to the Privy Council. It is gravely suggested by some of the teachers at University College that this College should, under the above clause, become a constituent College of the Victoria University; and of course, if this application were made and was successful, King's College, the Mason College at Birmingham, and the University College at Bristol would at once follow suit. The students of the teaching Colleges of England would thus all be able to obtain degrees in arts, science, and medicine from the northern University, and no further Teaching University would be required; whilst the secession of Owens College and the University College of Liverpool from the University of London would be followed by every other fully-equipped college in the kingdom. The idea is so strikingly original, and is such an easy mode of cutting the Gordian knot, that it seems really a pity that it should have been officially announced as premature by the Secretary of University College on the very next day. It will probably have served its purpose if it brings the necessity of a real Teaching University more forcibly before those interested in the movement and the authorities of the existing University, and proves to them that no stone will be left unturned to obtain for London students degrees not only in medicine, but also in arts and science, on similar terms to those which are readily afforded by every University in the world except by the imperial examining board in this metropolis which bears the name of the University of London.

Annotations.

"Ne quid nimis."

THE AMALGAMATION OF THE EXAMINING BOARDS.

A LEGAL correspondent takes exception to our statement in a recent article that the action of the Royal Colleges of Physicians and Surgeons in refusing to amalgamate with the Apothecaries' Society for the purposes of examination has placed the public under a serious disadvantage. As one of the public, he asks how this can be the case, and points out that (1) if the Medical Council appoint assistant examiners for the purpose of creating the Apothecaries' Society an examining board, it is a positive requirement of the Act that they "shall maintain such standard of proficiency as is required from candidates for the qualifying examinations—i.e., possession of knowledge and skill for the efficient practice of medicine, surgery, and midwifery"; (2) the public, he urges, are not affected by the question whether the Apothecaries' Society will charge a lower fee; and (3) if the Privy Council were to refuse to appoint assistant examiners, and were to leave the present Conjoint Board as the sole examining board, the fees would not prevent men from entering the profession, and the public would therefore be able to get good doctors to treat them. Concerning the last of these objections we have only to reply that it is a possibility which need not be entertained. The Apothecaries' Society will doubtless be able to substantiate their claim to be an independent examining board, through the appointment of assistant examiners either by the Medical Council or by the Privy Council. With regard to the first two objections, we admit at once that the Act has endeavoured to guard against any undue lowering of their standard of proficiency; but this standard is not one that can be recorded as a mathematical expression from which there can be no deviation. If any circumstance should lead

the Colleges to believe that a lower standard was not undesirable, it is not difficult to see that the General Council, in view of the intimate relation of its members with those who control the affairs of the licensing bodies, might easily be led to fall in with the views of the Corporation in this respect. Such professional opinion must also have its influence upon the Privy Council; the standard might not be suddenly altered, but a gradual change might be brought about if the Colleges thought this change desirable. We do not need to show that this would be prejudicial to the public, and we have only to consider what circumstance could give rise to it. The existence of rivalry between different examining bodies alone could do this, and it is this rivalry that we have been desirous of seeing rendered an impossibility by the creation of one examining body. The principle of unity is obviously of so much advantage to the public that it was but right that the medical corporations should have made some sacrifice to preserve it. They have, however, considered too much what they believe to be their own interest, and have thought less of the chief object which it was intended by the Act to attain. This is a question which we believe concerns the public not less than it does the medical profession.

LORD SALISBURY ON HOSPITAL SUPPORT.

THERE is something very refreshing in seeing the Prime Minister of England, at a time of considerable social and public anxiety, devoting his mind to an argument in favour of hospital support. All honour to Lord Salisbury for doing so. His paper is contained in the *Hospital* for Nov. 27th, as also two other deliverances on the same subject by Sir Andrew Clark and Sir Sydney Waterlow respectively, two other undoubted friends of Hospitals. The case for supporting these institutions could not be stronger than it is, nor could the time be more opportune. Never were the hospitals more straitened. It is said gravely that one or two of the best will have to be closed if unforeseen help does not come. And Christmas is at hand, with its mystic sympathies and benevolent impulses. Is it imaginable that a hospital in London should be closed for want of funds? There have been black days when banks have been closed; but such days would appear bright compared with that in which a great London hospital shall close its doors because men have closed their pockets in a community whose income is to be counted by millions. Lord Salisbury admits the great depression of the present moment, but he points out that this very circumstance strengthens his argument. He shows that depression of trade increases the amount of misery and disease to be relieved. The Premier thinks that one disadvantage of the case of hospitals is that it is so plain—no one disputes their excellence. No one who has seriously gone into hospital wards and work will do so. But is his Lordship quite right in thinking the case so undisputed? There are many people nowadays who think it their duty to prate about the abuses of hospitals on the strength of a few exceptional cases, and who give no thought to the mass of pain and disease and disablement with which they grapple. Lord Salisbury is right in placing the claim of hospitals at the very top of all claims. When sickness and accident overtake the working man all other misfortunes follow—wages stop, nourishment is stinted, so is clothing. The case is one for ready help. No one that is in actual work can be excused from the duty of some contribution to these institutions. "No doubt," says Lord Salisbury, "the heavier call is upon the rich, but it is equally upon all, and this deficiency will never be filled up unless the masses of those whose incomes are not large will each feel the responsibility of contributing what he can to so glorious an object." Let hospitals be as severe as they please in excluding cases of ascertained unfitness; nothing can justify the admission of cases that can be treated as well at home, and that ought to be under the care of the ordinary practitioner, who as he has advanced in skill has only grown more considerate in his charges. But let a bed be made, and let all medical and nursing help be ready, for the sick poor in the great calamities of their life. Similar lessons are urged by Sir Andrew Clark and Sir Sydney Waterlow. Sir Andrew insists on the advantages of inter-communication between hospitals, and Sir Sydney on the enormous development of skilled nursing and its importance in sickness. Let us hope that Christmas benefactions will follow these great arguments, and lighten the heart of many an anxious hospital treasurer.

LEPROSY.

THE Hawaiian Legislature, in its determined efforts to try to control the spread of leprosy in the islands, was fortunate in securing the valuable services of Dr. Edward Arning for purposes of special research. He found the bacillus lepræ plentifully in all nodules and diffuse swellings of the tuberculated cases and in similar lesions of the mucous membrane of the mouth, throat, nose, rectum, and large intestine, and in the discharges from the ulcerated lesions. He recognises a diarrhœa arising from the leprous ulceration of the bowels closely simulating a true dysentery, and thinks that the deaths usually ascribed to intercurrent pneumonia, tubercular phthisis, and dysentery should be more correctly ascribed to breaking down of leprous infiltrations of the lungs and bowels. He failed to find the bacilli in the early bright-red patches of vaso-motor congestion due to nerve lesions, in the anæsthetic patches of the so-called "anæsthetic cases," and in the chronic sores of necrotic parts of skin tissue and bone, but they were present in the nerves supplying the mutilated parts. There were none in the urine and none in the blood, nor could he discover by culture or otherwise the existence of any spores in the latter fluid. All attempts to obtain an independent and pure growth of the bacillus lepræ failed, nor were inoculations of animals of various ages in different parts of the body succeeded by a general infection. Arning inoculated a condemned criminal, but fourteen months later no definite results had followed, though a few bacilli could still be detected in the scar. Lastly, he demonstrated a vitality persisting over several months of the bacillus lepræ in putrefying tissues. On the clinical side, researches in electro-diagnosis convinced him that the anæsthesia and paralysis are due to leprous disease of peripheral nerves, but he does not regard the muscular crippling as so characteristic of the disease as the bone affections. Coming to therapeutics, we notice that Arning administered iodide of potassium without any good effect, also hyposulphite of soda, salicylate of soda, creasote, carbolic acid, and arsenious acid; and with some good effect salicylic acid and hypodermic injections of corrosive sublimate. He observed the efficiency of electrical treatment in anæsthetic cases, and insists on the value of salicylic acid in a 10 per cent. paste or ointment or solution in oleic acid, and also of pyrogallic acid in a 10 per cent. ointment or strong solution in traumaticine. Arning declares that, for one reason or another, he found it impossible to obtain from questioning the natives reliable statistics on which to base proofs for the hereditary or congenital transmission of leprosy; but we note from other reports that amongst the cases of advanced leprosy at Molokai sterility is almost universal, and the majority of the offspring, where either one or both parents are diseased, have been stillborn or have died within a short period after birth, and of those who have survived many have not yet developed leprosy. No congenital cases have been observed, but Arning saw two well-marked lepers aged respectively three and a half and four years. Dr. Mouritz points out that, whilst it is perfectly

true that healthy people may live with tuberculated lepers for years without contracting the disease, many on the other hand do not escape, and he especially refers to the remarkable percentage of the non-leprous assistants, or kokuas, on the settlement who contract the disease. Of 178 kokuas, 17 developed leprosy between Feb. 1885 and 1886.

GENERAL MAXWELL ON THE "BEAUFORT" LIMB.

IT was not in the nature of things that the artificial arms and legs of the Comte de Beaufort, served out annually by hundreds at home and abroad to the crippled poor, should in every case give satisfaction or escape the fault-finding which sometimes does duty for criticism. It is one thing to command success and another to deserve it; but that the good Count's invention comes fairly within the latter predicament must be evident to all who have considered it theoretically or who have had a just experience of it practically. General H. H. Maxwell has for upwards of six years been an energetic and well-judging administrant of these artificial limbs, and in a pamphlet, privately printed, he comes forward as a fully-qualified, impartial witness to their efficacy when duly applied to the proper cases. Having thoroughly schooled himself in the classic treatise on human locomotion by the brothers Weber ("Mechanik des Menschlichen Gehwerkzeuge": Göttingen, 1836), which is quite a sealed book to all but accomplished mathematicians, the General proceeds to show how by minute attention to the requirements of each cripple, above all by careful measurement, and, after trial, by such modifications as may be necessary, the limb can be so fitted, whether to the superior or the inferior stump, as to form a highly serviceable and by no means unsightly substitute for the natural arm or leg. The invention itself was gradual, and, like most things, has reached perfection by successive improvements. Baron Larrey's report on it to the Academy of Medicine in 1851 describes the apparatus as consisting of a piece of ash wood attached like the peg to the ordinary wooden leg. Replacing the metal disc of the peg, it is shaped somewhat like a foot, but shorter in length. The plantar surface is covered with a leathern sole garnished with cork at the heel. It is curved in form, the curve being such as to give the limb continuous lines of bearing on the ground while the body moves forward, save that the curve is not so perfectly uniform as to incur any danger of slipping. Dr. Tillaux, in his report on the Paris Exhibition of 1867, congratulates the inventor on having given the sole of the foot a convex form, which admits of the cripple's raising himself on the stump, while at the same instant he bends the leg to make a step forward, resting on the fore-part of the foot, thus imitating the natural step. In the words of the Count himself as to the action of the curved sole, "a bearing-point in front, acting like the fore-part of the natural foot, is the only means of equalising the pace (of the artificial and natural legs), and of enabling the cripple to get under weigh, as it were, at the beginning of a step with the artificial leg." A further improvement occurred to him in thinking of the poor, who have no money to spend on costly artificial limbs. It was this—to substitute wood for the usual steel uprights of the rich man's leg, and to adapt to it the foot with convex base. Successfully tried under Dr. Broca's superintendence, it was adopted in the civil and military hospitals and by the great charitable societies of Paris, and "at last there was put within the means of fortune's disinherited ones an apparatus which previously only the rich could afford to buy or keep in repair." All this fine philanthropic story is vividly told in the General's pamphlet, and the objections that have been taken to the invention—mainly in America, and sometimes on the score of unsightliness—are convincingly rebutted. And what has been said of the Beaufort leg may, *mutatis mutandis*, be equally said of the Beaufort arm—a not less brilliant triumph of rehabilitating invention. Here, again, General Maxwell's pamphlet successfully removes objections and vindicates theoretically and practically the efficacy of the limb. With the approach of Christmas, his able and kindly treatise might well have public as well as private distribution, if only to give to a wider circle the benefit of its opportune suggestions for the restoration of the crippled breadwinner to his sphere of usefulness.

POLLING THE FELLOWS OF THE ROYAL COLLEGE OF SURGEONS.

IT will be remembered that at the last meeting of the Council of the College of Surgeons it was decided to poll the Fellows, and that the President and Vice-Presidents were requested to draw up a circular, to be addressed to the Fellows to ascertain their opinion as regards (*a*) Members being allowed to vote for Fellows as members of the Council of the College, and (*b*) the admission of Members of the College to seats on the Council. This circular will come before the Council at their next meeting. We congratulate the Council on the concession to the now popular feeling, which this appeal to the Fellows implies. We assume that the terms of the questions submitted will agree substantially with those of the resolutions passed at the general meeting on Nov. 4th. It would perhaps be better if these resolutions were submitted *verbatim*. They were passed by overwhelming majorities at a public meeting called by the Council, and nothing short of what is set forth in these resolutions will satisfy the Members, or be fair to their aims, aspirations, and intentions. The limitations contained in the resolutions materially affect the decision and the ultimate result. The Council should therefore make their circular include all the points at issue. We shall then learn authoritatively how far the Council are in accord with those by whom they are elected to office. If backed by any large majority, their position will be strengthened by the vote; while if the contrary obtains, the Council will be able, with better grace, to give way, and so bring the present deadlock to a satisfactory close.

BARON HUDDLESTON'S STRICTURES ON THE PROFESSION.

"MEDICAL men who gloat over their scientific knowledge and air the same in the witness-box, where they would usurp the functions of the jury without taking a juryman's oath, and excuse themselves by saying they came to get the prisoner off." Such was the scathing denunciation which one of Her Majesty's judges thought fit to level against what it has been our privilege and pride to consider an honourable profession. We are not going to join issue with Baron Huddleston upon the merits or demerits of any particular case or instance of alleged professional shortcomings, but we take exception to the spirit and the substance of his remarks in their more extended application. If from fear, favour, or affection a medical man entered the witness-box with the avowed intention of delivering a prisoner other than with the conviction that he was going to apply his special knowledge to the furtherance of justice, we do not hesitate to say his conduct would merit all that was said by the judge at the late western assize. It is impossible to consider a medical man in the light of an ordinary witness, for he has to explain facts and terms not "understanded of the people," and much of the evidence he gives is inference from observations that he alone is fitted to make. Again, medicine being an inexact science, it is so easy to put several interpretations upon a number of facts which fit the several theories equally well. In the struggle to arrive at the truth and demonstrate it to a non-scientific audience a medical man is bound in great measure to assume

the position of advocate; but as the late M. Berryer, the inimitable French jurist, remarked, "there is the *fas* and the *nefas* of advocacy." Strictly speaking, it would be well if the medical man could confine his testimony to facts and leave the jury to draw the conclusions; but if this were the custom and practice, the verdicts of juries, founded upon physiological and pathological data, would soon be brought into contempt and placed under the ban of public censure. Faced by these difficulties, medical men can justly claim a wide indulgence if they seem to err or pass the bounds of legal procedure; and we make bold to say that, with rare exceptions, they quickly find a chord of sympathy struck between them and the occupants of the bench and jury-box. If the reports of the recent trials in the west of England can be trusted, it would not be difficult to take up the gauntlet so ruthlessly thrown down by his lordship, and challenge him upon the particular objects of his charge; but we prefer to leave that to the parties more immediately interested, and to take exception to what appears to be a grevious wrong done to the profession at large, unwittingly no doubt, but none the less reprehensible as coming from one clothed in the purity of the judicial ermine. We trust that Baron Huddleston will see his way to disavow the desire to cast obloquy upon a profession which he probably has had reason to consult and trust.

UREA AND ITS RELATION TO CERTAIN MORBID CONDITIONS.

THE question whether urea is furnished equally by all the albuminous constituents of the body, or whether it only represents the decomposition of one particular tissue or organ, has long been a puzzle to physiologists. The exclusive view, however, which regarded urea as derived only from one source, such as from the excess of nitrogenous food taken into the system but not employed, or from disintegration of muscular tissue, or from nitrogenous metabolism taking place in the liver, have given place to wider ones, and most physiologists are now disposed to admit that the sum total of urea eliminated in the twenty-four hours is derived from many sources. Such a belief would enable us to account for many anomalous circumstances attending on urea excretion in disease. Among the many possible sources of urea formation, Dr. Noel Paton (*Journal of Anatomy and Physiology*) has recently drawn attention to the destruction of blood-corpuscles in the liver, under the agency of certain hæmolytic agents, as leading to the increased discharge of urea and urinary pigment. Indeed, these researches have led Dr. Locke, in the *Practitioner* of Sept. 1886, to explain the diuretic action of mercury as exhibited by the action of the preparation known as "Guy's" pill. Dr. Oliver, of Newcastle-on-Tyne, has recently considered the subject from its clinical side, and has arrived at the same conclusion that Dr. Noel Paton has from the experimental—viz., that the destruction of blood-corpuscles forms an important source of urea; and he has shown that in diseased conditions in which chronic anæmia was present the daily discharge of urea was small, but that where the anæmia was quickly progressive the disappearance of blood-cells was always followed by a marked rise in the daily discharge of urea. Also in a paper on Functional Albuminuria communicated to THE LANCET, Oct. 23rd, 1886, Dr. Ralfe observes that the albuminous element of the blood-corpuscles brought to the liver under ordinary circumstances no doubt undergoes transformation into urea; but that when the destruction is considerable, and the process takes place suddenly, probably, whilst there is a decided increase in the formation of urea, a large proportion of this effete albumen is at once got rid of by the kidneys, giving rise to what is known as functional albuminuria. In a more severe form, however, the number of blood-corpuscles destroyed is so great that the conversion of all the effete hæmoglobin into bilirubin cannot be effected, so that a portion of the undestroyed hæmoglobin appears in the urine. In this manner Dr. Ralfe explains the relationship that exists between certain forms of albuminuria and hæmoglobinuria, and the increase of urea elimination that occurs in them. As we have already stated, the belief in the multiple sources of urea enables us to explain many anomalous circumstances attending urea excretion in disease. Thus, for instance, in phthisis with rapid wasting of tissue we should naturally expect a considerable increase of urea elimination if urea were solely derived from tissue metabolism, but no such increase can be definitely established even when high temperature exists; and Dr. Oliver has shown, from the observation of numerous cases, that when the ureal excretion in phthisis is augmented it is always accompanied by distinct evidence of the increase of the anæmia.

THE PERILS OF FOOTBALL.

THE Football Association have issued the following notice:—

"The attention of the Committee of the Football Association having been drawn to the recent numerous accidents at football, arising in some instances from rough and violent play, wish to impress upon all clubs belonging to the Association the necessity for a strict observance of the rules and laws of the game bearing upon the point under the provisions of Rule No. 15. Referees have the power in all cases of 'violent conduct to order the offenders at once to leave the field without any appeal having been made for foul play, and without the previous caution which is necessary in the case of 'ungentlemanly behaviour,' and as it is absolutely essential, both for the safety of players and in the interests of the game, that 'violent play,' easily to be distinguished from fair and legitimate charging, should be put down with a strong hand, the Committee trust that referees will not hesitate to use the power conferred upon them by the rule quoted above whenever occasion may arise."

We are glad to see that the authorities, of the Association game at any rate, recognise that the interests of football are being jeopardised by "violent play," and that accidents occur which are more numerous and severe than need be. We trust that referees will take the strong hint given them by the Committee, and, by using freely their powers, save football from the reproach under which it now labours. If, however, the rules in force are not sufficiently stringent to prevent these frequent and formidable accidents, the Committee of the Football Association must see that they are made so. We should also be glad to hear that the Rugby Football Union is taking steps to minimise the risk of accidents.

FIFTY YEARS' IMPROVEMENTS.

A REVIEW of the sanitary improvements which have been effected in this country during the reign of Queen Victoria was a fitting text for Captain Douglas Galton's address to the Society of Arts at the first meeting of the present session, and the subject was admirably treated by the lecturer. England has indeed undergone a complete transformation during this period, and English people may well remember how much is due to their Sovereign and her beloved Consort for the changes which have been brought about. The England of to-day is widely different from the England of fifty years ago; she has added largely to her possessions, and her influence has been felt in all parts of the world, but the improvements that have taken place have been greatest in the social condition of the people. Captain Galton's address enables all to understand how different were the conditions of life fifty years ago. The abolition of the window-tax, the institution of civil regis-

tration of births, marriages, and deaths, and the constitution of the General Board of Health and its successors, have contributed in an untold degree to the happiness and prosperity of the nation. In 1837 it was calculated that one-tenth of the population of Manchester and one-seventh of the population of Liverpool lived in cellars. The window-tax was a cause of excluding the air and shutting out the sun; but in 1851 there was a material advance. Gradually the courts inhabited by the poorer classes in towns were flagged and drained; means were provided for carrying off the waste water which people formerly threw down at their doors; the cleansing of streets and roads was undertaken, and improved water-supplies were provided. Later, health officers were appointed to each district, and its sanitary improvement seriously taken in hand. Captain Galton referred in some detail to the improved condition of the soldier, and reminded his audience that the greatest of the triumphs which had attended the Queen's reign was the saving of millions of lives and the avoidance of a vast amount of physical suffering.

THE LIGHTING OF RAILWAY CARRIAGES.

THIS is a matter of considerable importance, and we are glad to find that it is once again attracting public notice. Railway companies are necessarily monopolists; so far as appearances go, they are doubtless justified in assuming that those who are dependent upon them for the means of rapid travelling must need accept what they please to give. This is, however, but a shortsighted view of the position. As a matter of fact, the regular custom of passengers who "live out of town" and travel daily, or nearly every day, by railway, to and from their places of business, cannot fail to play an important part in the production of profits. And this is the class of passengers which most of all does the useful grumbling against a policy of parsimony and bad management, greatly to the advantage of the general community. Railway directors and administrators who turn a deaf ear to the complainings of these habitual passengers are guilty of singular folly. Looked at from the strictly commercial standpoint, such grievances as this class of customers ventilate are without exception drawbacks to perfect success in earning the largest practicable dividends for shareholders. If it were only possible to make an exact return of the number of families who do *not* live out of town, and whose daily custom is lost to the railway companies by reason of their failure to provide adequate and comfortable accommodation, this view of the case would come quickly home to the financial sense and acumen. We contend that, taking the lowest ground and appealing to the most mercenary and illiberal instinct of railway companies, it would be easy to show that they stand in their own way by not being more amenable to reason in the matter of redressing the wrongs of policy and management which are brought under their notice. Meanwhile there is higher ground that must be occupied. A very considerable amount of actual mischief is done by the long persistent refusal of railway companies to provide suitable means of lighting their carriages. This is a subject on which much has been written, but to very little purpose. The only possible explanation of the great neglect which has been shown in this particular respect is that chairmen and directors have not the courage to incur the needful expenditure. There is, of course, no sort of difficulty in the matter. If only the will existed, plenty of ways and means of attaining the object in view could be found. The Metropolitan and District Companies, not because they are more liberal than others, but because the line lying underground the carriages must needs be lighted, have shown how gas may be employed; and other companies have, by experiment at least, demonstrated how electric apparatus may be adapted to locomotive lighting purposes. It has also been made plain that either gas or the electric light can be economised by being placed under the control of one of the companies' officials, to be turned up when passing through tunnels by day or when it grows dark at night, and turned down again at pleasure. In short, there is no sort of excuse for the failure to provide a proper amount of light for both ordinary and extraordinary purposes. A great mistake was originally made by omitting to provide in the Acts of Parliament which license railway companies that their management should be supervised in every particular and reconsidered throughout, with a view to the public advantage, at short intervals. The supervision which exists is little more than a farce; it is powerless to compel the remedy of evils not directly dangerous to life. This is why so much annoyance and injury is done to passengers in a side way by systematic neglect to meet obvious needs and redress manifest grievances. This is why no inconsiderable part of the public must submit to have its average eyesight impaired, solely because, almost without exception, the railway companies refuse to provide a suitable amount of light in their carriages. It is idle to compare the policy of the several companies in this matter. They are all as parsimonious as the conditions of their enterprise admit. There is nothing whatsoever to be grateful for in relation to any one of the number. Nor have we the least hope that anything we can urge will move them to be reasonable. Our appeal must be to the public, and we would point out that the practice of reading in railway carriages, as for the most part at present lighted, is one that ought to be discontinued. The instances in which injury is inflicted upon persons with weak or irritable eyes are very numerous; and cases of cerebral irritation set up by habitual efforts to read in dimly-lighted carriages are of frequent occurrence. Until the cry for more light elicits a response, it will be simply prudent to abandon the attempt to beguile the time spent in railway journeys by reading. Better do this than sacrifice sight or induce brain disease.

CAUSE OF SPONTANEOUS RUPTURE OF THE HEART.

THE cause of rupture of the heart, which has recently been brought home to the thoughts of the profession in all countries by the case of Professor Panum, has been touched upon by Ziegler, Leyden, Huber, Kraus, and other authors, and has recently been illustrated at the Society of German Practitioners in Prague by Dr. R. v. Limbeck, assistant in Professor Chiari's Institute of Pathological Anatomy, who demonstrated a case which had occurred in the Jewish Hospital, under the care of Dr. Saar. A man, aged seventy-three, who was in the hospital with the signs and symptoms of severe bronchitis, accompanied with fever, but with no indications of cardiac disease, while sitting on the nightstool became suddenly collapsed, and died in ten minutes. The necropsy revealed a rupture of the left ventricle, three centimetres in length, and a remarkable thinning of the wall of the ventricle towards the apex, so that the cavity, instead of being in the form of a cone, was nearly spherical. The muscular substance also was of a dark-brown colour and softened. Evidences of atheroma and calcareous degeneration were found in many of the more important arteries of the body, and when a probe was passed into the left coronary artery from the aorta it was arrested at the depth of a centimetre, the obstruction being, as was found on opening the vessel, complete for half a centimetre. All the coronary vessels were also affected with a considerable amount of endo-arteritis, which in one branch of the left coronary artery had led to a complete blocking up by a thrombus. Dr. v. Limbeck pointed out that Henle and Hyrtl have shown that the coronary arteries do not anastomose with one another, except by means of

capillaries, and so the great softening (fatty degeneration or acute myomalacia), which was found especially in the part of the heart muscle supplied by the obstructed branch of the left coronary artery, is easily explained. The thinning of the heart wall was of course of the nature of a partial heart aneurysm, which, when the extra pressure caused by straining at stool was put upon it, gave way. Ziegler, too, has shown that the anterior wall of the left ventricle is the usual seat of rupture of the heart, which may very probably be due to myomalacia consequent on sclerosis of the coronary artery, which has been itself caused by thrombosis or embolism.

THE OFFICE OF CORONER FOR EAST MIDDLESEX.

THE proposal that the district apportioned to the coroner for East Middlesex shall be divided recalls the time when the founder of this journal, the late Mr. Thomas Wakley, M.P. for Finsbury, as well as coroner for Middlesex, did the duty of the whole western division of the county, and did it well. Of course, the population has greatly increased since his day, but it is difficult to believe that this fact can wholly explain the multiplication of inquests. We cannot, of course, presume to account for the altered condition of affairs, but it may be permissible to offer one obvious suggestion—namely, whether the need for a largely increased and increasing number of inquests is not, in part at least, due to the fact that, as a rule, the issue of an inquiry is not productive of any decisive result. It must be manifest that if nothing comes of the misconduct or neglect of those who provide the subject matters of inquests, the number of these inquiries is likely to increase. Practically, we fear, the knowledge that an inquest now commonly amounts to nothing more than a formal proceeding, by which the county obtains a satisfactory knowledge of the cause of death at the public expense, induces those formerly in the habit of sending for medical advice, "for the sake of a certificate," to let matters take their course. The proportion of cases in which neglect to call in a medical practitioner is the sole or principal cause of the need for a coroner's inquest is very large. Genuine cases of doubt or mystery of course increase with the population; but cases of neglect to seek medical advice increase in greater ratio. Another source of increase in the number of inquests is to be recognised in the multiplication of institutions which give medical advice with very little discrimination, so that, practically, the victims of heart, and lung, and brain, and organic diseases generally, are not expected to place themselves under responsible medical treatment, and when dying suddenly, as they are likely to do, inquests are required to determine the cause of death.

MICRO-ORGANISMS IN ACUTE RHEUMATISM.

DR. PAUL GUTTMANN records a case (*Deutsch. Med. Woch.*, No. 46) which he thinks has some bearing upon the etiology of acute rheumatism. The case was that of a lad fourteen years of age, who was admitted into hospital with well-marked symptoms of the disease. Pericarditis supervened, and owing to the rapidly extending effusion paracentesis of the pericardium was practised; only a small quantity of purulent fluid was obtained, but after death, which shortly ensued, the sac was found to be distended with pus and fibrin. There were also numerous abscesses in the kidneys; but the effusion in a knee-joint which was examined contained the usual sero-fibrinous exudation, and no pus. Microscopical examination of the pus and exudate showed micrococci in abundance (staphylococcus pyogenes aureus), and gelatine cultures were readily obtained. Dr. Guttmann had little doubt that this microbe, which was found in the joint effusion as well as in the pericardial and renal pus, bore an etiological relation to the disease in this instance, but suggests that other forms may be found in other cases. Micrococci have been found in pericarditis by other observers, and the experimental production of endocarditis by Orth, Ribbert, and others, by means of the intravenous injection of cocci, is one of the most interesting of recent contributions to pathology. Acute rheumatism, again, has many analogies with specific infective diseases, as was shown at the Brighton meeting of the British Medical Association by Dr. Mantle, who also described the discovery he had made of micrococci in the blood in this disease.

METROPOLITAN ASYLUMS BOARD: CLINICAL INSTRUCTION.

THE Committee of the Eastern Fever Hospital of the Metropolitan Asylums Board have appointed Mr. Reginald Dudfield, B.A., L.R.C.P., M.R.C.S., of Upper Phillimore-place, Kensington, to be junior assistant medical officer at the hospital for a limited period. This is the first appointment made in carrying into effect the resolution of the managers to make their small-pox and fever hospitals available for clinical instruction in infectious disease for the benefit of registered medical men whose opportunities for observing this class of diseases have been curtailed almost to the point of extinction by the closure of general hospitals against patients suffering from small-pox, typhus fever, scarlet fever, and, in a less degree, enteric fever. The Local Government Board recently gave their sanction to the principle involved in Mr. Dudfield's appointment. The gentlemen thus appointed will be entitled "assistant medical officers." They will have specified duties, and be in all respects subject to the regulations in force with regard to the hospitals. The remuneration of the office is limited to the allowance of residence, rations, &c.

CHOLERA IN EUROPE.

THE recurrence of cholera in fresh localities in Eastern and Central Europe is the most striking feature of the present phase of this year's epidemic. Large outbreaks are hardly to be expected in Europe at this season of the year, but it is most disquieting to learn that in certain parts of Austrian and Turkish Croatia, and in some districts of Hungary, fresh places are being attacked. The disease has also taken a fresh stride in a south-eastern direction, Belgrade having been attacked. According to the latest intelligence, cholera broke out in one of the infantry barracks, and between the 21st and 27th of November there had been fifty cases and ten deaths. The King of Servia, on receiving the intelligence, returned to his capital and personally visited the sick; he at the same time stimulated the authorities to take ample precautions to prevent the spread of the disease. Typhus is also prevalent in Belgrade, so that there is doubtless ample room for sanitary progress.

AIDED EMIGRATION OF PAUPER CHILDREN.

AMONG various questions relating to the poorer population, not the least important is that which affects the future of pauper children. What is to be done with them? Shall they grow up under the guardianship of the parochial system to find what occupation they can in an overcrowded market, and perhaps to be ultimately absorbed in the ranks of the idle and criminal classes, or is there any course which offers them a surer hope of future usefulness? This question cannot yet perhaps be answered in the affirmative, but there is reason to believe that it may be so answered under a system of aided emigration. A recent writer assures us that many of the children who now burden the parish rates either from poverty alone or as the inmates of reformatories, might be transferred to the colonies to

the advantage of the latter, at a cost under that of their annual maintenance at home. There are distinct advantages in such a scheme if it could be satisfactorily carried out. On the one hand, children at an age when they are still impressionable for good or evil are removed from the damaging influence of early associations; on the other, they take a fresh start in life in a new country, where, if inclined to work, they will be welcome, and will have every opportunity and encouragement to use their energies. Many will equally gain in physique by leaving behind them at a critical age the unhealthy slums in which they were reared, and taking up out-door occupations in their adopted country. The experiment has already been tried, and so far, we learn, with success.

THE HOSPITAL SUNDAY FUND.

THE Council of the Hospital Sunday Fund, on Monday last, agreed on their report to the meeting of the constituents, which is to be held in the Mansion House in December. The special exertions of this year have resulted in a collection of £40,399 7*s.* 1*d.*, as compared with £34,320 8*s.* 5*d.* in 1885, and an average of £30,121 6*s.* 8*d.* in the preceding thirteen years. The legacy of £1000 by the late Dr. Wakley was gratefully acknowledged by the Council. A proposal to invest that sum was with much unanimity discouraged by the meeting. Sir Sydney Waterlow led the objection to it by strongly expressing the view that we must not burden ourselves with the anxieties of those who have to come after us, but with pressing urgencies of the present. It was resolved to recommend for election on the Council, the Earl of Strafford, Sir Andrew Clark, Mr. Alderman De Keyser, Mr. R. Foster, Mr. Wakley, Mr. Lionel Cohen, M.P., the Rev. Prebendary Eyton, the Rev. C. J. Ridgway, the Rev. Dr. Clifford, and the Rev. J. R. Wood, to fill the vacancies which have recently occurred in its numbers. Benevolent persons who wish to benefit hospitals either during life or after their death cannot do better than make the Hospital Sunday Fund the almoner of their charity. Money distributed through them would go straight, and with only the slightest abatement in the way of expenses, to the most needy and meritorious charities. There is no fund administered so economically as that of the Hospital Sunday Fund. During the past year the extraordinary steps taken to increase the fund have made the working expenses a little more, but even so, they only amount to 3·942 per cent. of the gross receipts.

VEGETABLE OR MIXED DIET.

THE question of preference between animal, vegetable, and mixed foods is constantly recurring, and will probably continue to present itself for a long time to come. This is the more likely, since it is one of those questions the answer to which will greatly vary in the case of different individuals. The purely animal diet need hardly now be considered, since it is probably unknown in this country. The same cannot be said of the vegetarian system. A restaurant recently opened in the Strand by Messrs. Spiers and Pond, and another called the "Orange Tree" near Charing-cross, on the tables of which meat is not found, are sufficient to testify that London, at all events, is inclined to give a trial to light fare. There is, undoubtedly, much to be said in favour of this kind of nourishment. The results of the penny or halfpenny dinner supplied to school-children afford proof of its power to sustain and increase in the young both physical and mental strength. Similarly, there are adults whose constitutions are on the whole better suited for assimilating herbs or farinaceous food than meat Such, for example, are the gouty, who might in many cases restrict themselves to a vegetable diet with much benefit to health. Again, there are many persons who have no such constitutional difficulty to consider who might with advantage at least reduce their daily consumption of animal food. Three or four meals a day at which meat is taken cannot constitute the rule of wholesome living for any but a small and active part of civilised mankind, though this does not imply that a total absence of meat is rather to be advised. For the great majority of healthy people we should certainly recommend a mixed diet in preference to any other, though a vegetable meal now and then will afford a change of fare at once nutritious and palatable.

THE PUBLIC HEALTH ACT, 1875.

THE Birmingham Corporation has always deserved to be considered one of the more advanced of English sanitary authorities. It has now, under the advice of its health officer, the president of the Society of Medical Officers of Health, proceeded against a landlord who refused to abate a nuisance on the ground that there was a tenant in possession, and that he could not properly enter the premises except for certain reasons specified. This case was heard on appeal before Mr. Justice Cave and Baron Pollock, who decided that the landlord was liable to do the work, being the owner within the meaning of the 94th section of the Public Health Act. If he had shown under Section 93 that he had used all due diligence to carry out the order, he would not have been liable for any penalties, but this he had omitted to do. The decision of the Court was therefore against him, Mr. Justice Cave observing that it would be hard on an occupier if he had to make good structural defects which arose from the neglect of the owner; while Baron Pollock wisely pointed out that "it is not probable that the tenant in the majority of instances would object to his landlord coming on the premises to abate a nuisance which was injurious to the health of the persons living there." This decision will doubtless reduce the difficulties sanitary authorities have to meet at the hands of obstructive landlords, and tenants will be encouraged to seek the aid of their local board when they have reasonable ground for complaint. It deserves, therefore, to be widely circulated.

THE FIRST EXCISION OF THE SPLEEN IN SPAIN.

SENOR DON DR. RIBERA recently performed excision of the spleen on a boy of ten in the Hospital del Niño Jesus in Madrid. This is the first time the operation has been performed in Spain, and unfortunately was followed by a fatal result the next day from shock. Immediately after the operation syncope came on, and it was with considerable difficulty that the child was revived. It was remarked that the operating theatre, although in one of the most important hospitals in the Spanish metropolis, was badly lighted, and unprovided with a subcutaneous syringe for injecting ether or with a faradisation instrument.

PROSTITUTION IN LIVERPOOL.

MR. FREDERICK W. LOWNDES of Liverpool has published a pamphlet, to be had of Messrs. Churchill, on the subject of Prostitution and Venereal Diseases in Liverpool. Mr. Lowndes' position as surgeon to the police force of Liverpool and the Lock Hospital gives importance to his views on this painful subject. He estimates that there are at least 4000 prostitutes plying their trade within the city, without let or hindrance, however diseased they may be, so long as they are not guilty of flagrantly disorderly conduct in the streets. One of the most interesting parts of his paper is that in which he discusses the causes of prostitution:—1. Those relating to men—(*a*) juvenile precocity: (*b*) the large number of young men in Liverpool marriage-

able but unmarried, thousands living a life of enforced celibacy; (*c*) men able to marry, but unwilling; (*d*) intemperance. 2. Those relating to women—(*a*) want of parental control; (*b*) seduction; (*c*) love of dress and finery; (*d*) bad arrangements in domestic service; (*e*) immoral female characters in large factories where girls are employed. The latter part of Mr. Lowndes' paper is devoted to an account of the laws for controlling prostitution, which are very ineffective. He ends by quoting Sir William Jenner, which should be studied by all young men and by public authorities. But there is a terrible continuity and persistence in this vice.

SIR JAMES PAGET ON SENTIMENT.

AT a luncheon held in St. Bartholomew's Hospital a few days ago, to celebrate the reopening of St. Bartholomew's Church, Sir James Paget gave utterance to a manly and practical view of the question of sentiment as a source or spring of action. We are too much inclined to despise or undervalue sentiment in this day of pretentious realism and affected precision. It is well that great and trusted scientists, whose words must needs have weight with the whole profession, should be both able and willing to speak out on this topic. We wish the speech of Sir James Paget had been reported in full. Meanwhile one sentence is worth preserving, and might well form the text of a sermon addressed to those who seem to think that because science claims to rest on facts, such fancies as supply the material of sentiment must needs be disregarded. This is a fallacy that cannot be too frequently or forcibly exposed.

THE HARVARD CELEBRATION.

THE 250th anniversary of Harvard College was celebrated on Nov. 5th and three following days. On the 5th there was a reunion of the *alumni* of the Law School, at which Mr. Justice Oliver Wendell Holmes, jun., delivered an oration. The second day was celebrated by the undergraduates; and on Sunday, the 7th (the actual anniversary of the foundation), memorial services were held in the College chapel. The final day, or "Graduates Day," was occupied by a meeting in the morning in the College theatre, when an oration was delivered by the Hon. Jas. Russell Lowell, and a poem by Dr. Oliver Wendell Holmes. The honorary degree of LL.D. was conferred upon the following three distinguished members of the medical profession—viz., Dr. Leidy of the University of Pennsylvania, Dr. S. Weir Mitchell of Philadelphia, and Dr. J. S. Billings of Washington. The President of the United States was present on this occasion, and also at the banquet which was held in the afternoon. A torchlight procession of the students closed the day's proceedings. The *Boston Medical and Surgical Journal*, from which we quote, urges the propriety of starting an association of medical *alumni* of the University, the Medical School being almost the oldest and largest department.

THE VACANT CORONERSHIP.

THE Middlesex magistrates have decided to present a petition to Her Majesty, praying that the eastern district of the county, as constituted by Order in Council made in 1862 for the purpose of an Act to amend the law respecting the office of county coroner, be altered or divided. The chairman stated that the new coroner would have to confer with the Court as to the salary, and that he certainly would not be elected at the salary which the late coroner received. In addition to the candidates for the vacant office mentioned in our last issue, the following have announced their intention of competing for the coronership: Mr. Cresswell Hewett, M.R.C.S., Mr. W. E. Baxter, and Mr. Thomas Beard.

THE HOUSE OF INDUSTRY HOSPITAL, BOSTON.

THE current number of the New York *Sanitary Engineer* gives plans and descriptions of the new hospital, on the pavilion type, which has been erected for the House of Industry at Deer Island, near Boston. It consists of four one-storeyed pavilions united by a corridor, with a kitchen and administrative block near to the centre of the buildings. The pavilions are on trestels, and their floorings are 4 ft. from the ground; each pavilion is 128 ft. long and 28 ft. wide, with an average height of 18 ft. Each pavilion has the public ward near the middle of its length. The public ward is approached through a group of ward offices and at the far end of each pavilion are isolation wards. The waterclosets are in projecting turrets. There is nothing very novel in all this. We are told that the air-space per bed is about 1500 cubic feet. This means that, with an average height of 18 ft. and a width of 28 ft., each bed has only 84 square feet of floor space, and that there is barely 3 ft. between the beds. This is far too little, and the architect would have done well to have reduced the height of the pavilions and have given more area per patient. The buildings are entirely of timber, and are heated by hot-water coils. In the winter there is provided a complete arrangement for artificial ventilation; a series of air-ducts in the floor terminate in an exhaust flue at one end, which is heated by a steam coil. We are told that the buildings cost $60,000, or £12,000. One pavilion of the four is still wanting, so that there is now accommodation for about 100 out of the full complement of 134 patients. This makes the cost per bed about £120, a very moderate sum; but it must be remembered that the building is entirely of wood, and not to be compared with solid structures of brick or stone.

THE STATE EXAMINATION AND THE DIFFERENT PRUSSIAN UNIVERSITIES.

IN looking over the summary of the results of the Prussian State examinations for diplomas during the last year (which we briefly noticed in our impression of the 20th ult.), one is struck by the good performances of the candidates from some of the smaller universities. While Berlin sent up 203 candidates, 53 of whom had previously been rejected, passing 1 in the first class (very good), 76 in the second (good), and 50 in the third (sufficient), Bonn sent up 47 men, only 2 of whom had been previously rejected, passing 4 in the first class, 29 in the second, and 8 in the third; and Konigsberg, with 2 rejected and 33 new candidates, achieved 6 first classes, 15 second, and 3 third. The plucking seems to have been most severe in Halle, Konigsberg, and Berlin, where about a third of the men failed. In Kiel the proportion of failures was about 1 in 7, and in Bonn only 1 in 8.

VALUE OF MEDICAL EVIDENCE IN LIFE INSURANCE.

THE *Scottish Banking and Insurance Magazine* of Nov. 5th contains an able article on the "Apportionment of Premium to Risk in Cases of Life Insurance." The object of the author is to refute the views of Mr. Chisholm, a Fellow of the Institute of Actuaries, and manager and actuary of a life insurance company, who in a paper before the Institute had expressed himself as being rather doubtful of the advantage of medical estimates of the value of life for insurance purposes. Mr. Chisholm says that in the olden days irregularity of the heart and albuminuria were never discovered. But he does not think the offices were much worse off in consequence, because in his estimation these maladies were probably only transient. It is curious to see a man of importance and intelligence writing so in these days. He is well answered in the paper before us The author points out that the competition in life insurance

business and the consequent low rates on which it is done make care and every kind of precaution against bad lives essential. The question is not whether too much importance may not be occasionally attached to a medical symptom or a physical sign, but whether intelligent medical evidence is better dispensed with. Be it that such symptoms as Mr. Chisholm mentions are occasionally temporary and unimportant, who is to decide in any given case in which they exist whether they are so or not? The discussion at Brighton on this very subject showed how judicial good medical opinion is even in regard to grave physical signs, and how much disposition there is to give due credit to all qualifications of them. Mr. Chisholm's views are only tenable on the supposition that medical men are deficient in common sense and that directors have more than their share, which may be an excusable theory in the actuary of an insurance office, but will not commend itself to ordinary people. It would be strange indeed if all the improvements in the diagnostic and therapeutic departments of medicine had no value for insurance purposes. We commend the article in our contemporary to our readers and all concerned.

THE FORTHCOMING LECTURES AT THE COLLEGE OF PHYSICIANS.

THE following arrangements have been made in respect of the above lectures for 1887. The Gulstonian will be delivered on March 3rd, 8th, and 10th, by Dr. Macalister of Cambridge, his subject being "The Nature of Fever"; the Croonian will follow on the 15th, 17th, and 22nd of the same month, and will be given by Dr. Broadbent, who will discourse on "The Pulse"; on March 24th, 29th, and 31st the Lumleian lectures will be delivered by Dr. Priestley, who will take for his subject the "Pathology of Intra-uterine Death."

LEGACIES TO HOSPITALS.

THE will of a man like Mr. Morley, at once wealthy and benevolent in a high degree, is a matter of much public interest, and might without disrespect be made the subject of a little criticism. From our point of view it has one great defect—it does not leave anything to hospitals. We believe that hospitals have a peculiar claim on such accumulations of money as that so creditably associated with Mr. Morley. If they are not to be built and endowed out of such accumulations, it is difficult to see much prospect of relief for them in their present impecunious position. Of course it will be said that Mr. Morley did what he thought fit for hospitals while he lived, and few men were more entitled to claim the right to do what he pleased with his own; but, even so, we may express disappointment that about half a million of money can be bequeathed by one so intimately and honourably associated with hospital funds without mention of such institutions.

MILK POLLUTION.

AN interesting case has been heard at the Guildhall showing the possibilities of pollution of milk from noxious chemical effluvia. The defendant was summoned at the instance of the Commissioners of Sewers in the City for carrying on a chemical process which was dangerous to the public health. Complaints had been made to the medical officer of health by a milk-seller who carried on business on the ground-floor of the premises of which the defendant occupied the basement, the complainant stating that the milk was injured by some effluvia arising from the lower part of the house. Dr. Sedgwick Saunders gave evidence that he visited the premises and found a distinct metallic effluvium emanating from the basement; as the result of chemical testing, he was under the impression that it consisted of nitrous acid gas, which was suffocating and poisonous; the milk would absorb the effluvium and thus become dangerous to the drinkers. Alderman Knill, before whom the case was heard, inflicted the full penalty of £5 and 2s. cost. No notice of appeal appears to have been given.

THE FRENCH MILITARY MEDICAL SERVICE.

THE number of admissions into the French Military Medical School of Val-de-Grace has this year been much fewer than usual. As a rule sixty-one students who have completed two years' medical study are admitted. This time, however, only twelve have been accepted. This is not, it appears, due to any existing surplus of military surgeons, for, in fact, the medical department of the army is by no means complete as regards its *personnel*. The reason is to be looked for in the necessity for economy. Indeed, it has been suggested that the school of Val-de-Grace itself may have to be abolished. Sudden changes are of course highly inconvenient to intending candidates, and a petition to the Minister of War is being prepared requesting that the number of vacancies to be filled should always be announced some time in advance.

DR. WATERS AND THE CHEMISTS OF CHESTER.

THE chemists of Chester have presented an address of congratulation to Dr. Waters on the presentation of the gold medal by the British Medical Association, and the presentation of his portrait by the public of Chester. We congratulate Dr. Waters. He knows our sentiments. He deserves great credit for years of trouble to obtain medical reform, though at the last he suffered himself to take too limited a view of the whole subject, and to accept an Act which, on the admission of the President of the Medical Council, withholds the chief reform, and may yet give much trouble to the profession.

THE EXAMINATION OF THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE first examination for the certificate in Psychological Medicine, conducted by Drs. Hack Tuke and Savage, was held on Nov. 29th and 30th. The written examination included questions on Classifications and Symptoms, on the forms of Mental Disease associated with Epilepsy, on Testamentary Capacity, the Treatment of Acute Mania, and on Statutary Forms relating to Admission. The practical part included examination of patients, filling up and correction of certificates, &c.

RECENT HONOURS.

THE Queen has given orders for the appointment of Deputy Surgeon-General John M'Neale Donnelly, M.D., of the Indian Medical Department, to be an Ordinary Member of the Military Division of the Third Class, or Companion of the Order of the Bath. Her Majesty has also been pleased to confer upon Deputy Surgeon-General Stewart Aaron Lithgow, C.B., M.D., of the Army Medical Staff, for action at Ginisa, the distinction of Companion of the Distinguished Service Order.

TYPHOID FEVER IN PORTH.

THERE is an outbreak of typhoid fever in Porth within the local board district of Ystradyfodwg, the prevalence being associated with conditions of excrement disposal and drainage, which are locally described as a disgrace to any civilised nation. It is alleged that the attention of the sanitary officers has been called to the matter, but that nothing has yet been done by way of remedy. We trust the matter will receive prompt attention.

THE GENERAL HOSPITAL IN JERSEY.

WE regret to say that the opportunity occasioned by the lamented death of Dr. Charles Godfray, of Jersey, has not been used for improving the medical service of the General Hospital at Jersey. The arguments for enlarging the staff were unanswerable, but they have not prevailed. Another one-man appointment has been made. The fortunate gentleman is Mr. Walter Falla. We do not doubt the fitness of Mr. Falla to stand in the succession to Jones and Godfray, though his oldest qualification only goes back to 1879. We may admit, too, the force of much of the good-natured banter in which the *Chronique de Jersey* indulges with regard to the abounding and superlative testimonials of his fellow-candidates for the post. But for all that, we think that the principal, and till lately the only, hospital in Jersey ought to be served by a larger and more varied staff. A little competition in hospital is good for a community isolated as that of Jersey is, and remote from great hospital centres.

MR. FURNEAUX JORDAN.

OUR readers will learn with regret that Mr. Furneaux Jordan, Senior Surgeon to Queen's Hospital, co-Professor of Surgery at Queen's College, Birmingham, &c., has recently resigned his many surgical appointments, and that the state of his health compels him to retire altogether from professional life. His friends and old pupils intend giving him a substantial testimonial in recognition of his many contributions to the science of surgery, and of his services to the profession. MR. Bennett May and Mr. Jordan Lloyd are acting as honorary secretaries, *pro tem.*, to the testimonial fund, which we hope will prove worthy of Mr. Jordan's acceptance.

ANOTHER SENSIBLE JUDGMENT.

DR. EDIS, as "the other certifying doctor," has been sued for his share of the responsibility in placing a lunatic in an asylum. The case was complementary to one on which we quite recently commented. In this instance Baron Pollock ruled that the defendant was within the protection of the Act, and directed a verdict for him, and gave judgment accordingly. These sensible procedures will do much to relieve the tension which exists in relation to the working of the Lunacy Laws, which afford very little security to the doctors, particularly as they have been of late years set in motion by suitors and judicially administered.

EPIDEMIOLOGICAL SOCIETY.

AT the next meeting of this Society, which will be held at 11, Chandos-street, W., on Wednesday next at 8 P.M., Dr. J. Edward Squire will read a paper on "Typho-malarial Fever." It is expected that the paper, and the discussion it will elicit, will be of much interest. Dr. Squire has recently studied this subject at Suakim, and it is hoped that others with special experience of the disease will take part in the debate.

FOREIGN UNIVERSITY INTELLIGENCE.

Berlin.—Professor Gerhardt celebrated his twenty-five years' jubilee on the 9th ult.

Cracow.—Dr. Lazarski, Extraordinary Professor, has been appointed Professor of Pharmacology.

Dorpat.—Dr. Carl Dehio has been appointed Extraordinary Professor of Special Pathology and Therapeutics.

Greifswald.—Dr. Grohé, Professor of Pathological Anatomy, who had been made a Privy Councillor, did not live to enjoy his new honours, his death having occurred on Nov. 21st, in the fifty-seventh year of his age. In 1858 he was first appointed to Greifswald, and in 1862 received the full professorship. He is best known for his researches in pathological chemistry, especially upon the occurrence of glycogen in the lungs and heart, and more recently he studied the subject of the effects of intravenous injection of pathogenic fungi, in which he was followed by Dr. Grawitz, who is likely (*Berl. Klin. Woch.* No. 48) to succeed him in the professoriate.

Marburg.—Professor Mannkopff, Director of the Medical Clinic, has been made a Privy Councillor.

Munich.—Dr. Gietl, though improved in health, being still unable to give clinical instruction, Professor Bauer will for the present session take charge of the first medical section of the City Hospital.

Paris.—M. Béclard, Professor of Physiology, has been nominated Dean of the Faculty of Medicine for a fresh period of five years.

Prague (German University).—An invitation having been given to Professor Heubner of Leipsig, to a chair of Diseases of Children in Prague, and the Saxon Government being unwilling to make the arrangements required by Professor Heubner as the condition of his remaining at Leipsig, he has decided to accept the call and go to Prague. It is stated that in case of his refusal Dr. Escherich of Munich, would have been invited.—Dr. Wilhelm Fischl has been appointed to act for Professor Bandl, who is ill.

Würzburg.—The two names proposed by the Medical Faculty for the vacancy caused by the removal of Professor Grashey to Munich are those of Dr. Jolly of Strasburg and Dr. Krieger. (Dr. Jolly is the son of the late physicist of that name, of Munich.)

FROM the report of the examination made by Colonel Sir Francis Bolton of the water supplied by the several metropolitan water companies during the month of October it appears that the Thames water sent out by the Chelsea and West Middlesex companies again contained the very small proportion of organic matter which characterised the samples during the previous three months; whilst the supplies of the Southwark, Grand Junction, and Lambeth companies exhibited a noticeable increase in this respect, although the proportion was by no means excessive for the time of the year. The water drawn from the Lea and distributed by the New River and East London companies manifested no change since the September samples were taken, the proportion of organic matter present being exceptionally small. All the waters were clear and bright on delivery.

DR. WILLIAM TINDAL ROBERTSON, who on the 29th ult. was elected member of Parliament for Brighton, received his professional education at University College Hospital. He became a licentiate of the Apothecaries' Society in 1848, a member of the Royal College of Surgeons of England in 1850, and in 1853 obtained the degree of M.D. at the University of Edinburgh. In 1854 he commenced practice at Nottingham, remaining there until failing sight, which has since culminated in total blindness, compelled him to retire in 1875. Since that date Dr. Robertson has resided at Brighton, and taken an active part in the political life of the town.

IT is authoritatively stated that the Senate of University College, London, has not taken any definite action towards enrolling the College as a constituent part of Victoria University, and that the question of such enrolment has not even been broached at the meetings of the Council.

A BARQUE arrived off Dover on the 27th ult. from the West Indies, and was placed in quarantine, having yellow fever of a very bad type on board. The vessel was not allowed to approach the harbour.

AT the meeting of the Branch Medical Council for England held on Friday last, resolutions were passed by the Council recording their sense of the judicious care and management with which the details of the late election of direct representatives on the General Medical Council had been conducted by their Registrar, Mr. Millar, and an Honorarium of £50 was presented to him.

THE Grand Cross of Isabel the Catholic has been conferred on Señor Don Dr. Matías Nieto Serrano, editor of *El Siglo Médico*, the leading Spanish medical weekly.

THE new pathological institute at Bonn was opened on Oct. 30th, with appropriate ceremony. It is said to be the finest of its kind in existence.

THE ELECTION OF DIRECT REPRESENTATIVES.

THE following are the numbers of votes polled by the respective candidates last week at the election to the General Council.

Number of voting papers sent out in England ...	18,074
Number of voting papers returned from England	13,381
Wheelhouse, Claudius Galen, F.R.C.S. Eng., Leeds ...	8548
Foster, Sir Balthazar Walter, F.R.C.P.L., Birmingham	7718
Glover, James Grey, M.D. Edin., London	6614
Richardson, Benjamin Ward, M.D. St. And., London ...	4704
Dolan, Thomas Michael, M.D. Durh., Halifax, Yorkshire	3063
James, Moses Prosser, M.D. St. And., London	1223
Morris, Edwin, M.D. St. And., Spalding	986
Balding, Daniel Barley, F.R.C.S. Eng., Royston	896
Taaffe, Rickard Patrick Burke, M.D. Lond., Brighton	878
Brown, George, M.R.C.S., L.S.A., London	865
Carpenter, Robert Henry Spencer, L.R.C.P.L., London	731
Bullock, Henry, F.R.C.S. Eng., Isleworth	463
O'Connor, Bernard, M.D. Q.U.I., London	320
Watts, Algernon Newbegin, M.R.C.S., Sharnbrook ...	214

In consequence of many of the voting papers having been carelessly filled in, a considerable number were invalid.

Result of Poll for Scotland.		*Result of Poll for Ireland.*	
Dr. Bruce	642	Dr. Kidd	911
Dr. Morton	596	Dr. Jacob	614
Dr. Sinclair	414	Mr. Laffan	195
		Dr. McMordie	161

DR. GLOVER'S ELECTION.

A MEETING of Dr. Glover's Executive Committee was held at the residence of Sir Andrew Clark, Bart., on Tuesday evening last. There were present, Dr. Stokes (chairman), Sir A. Clark, Dr. James Anderson, Dr. Glover, Mr. Shirley Murphy, Mr. Pearce Gould, Mr. Anderson Critchett, Mr. Lough, and Mr. Keele and Mr. Fraser Stokes (hon. secs.)

Dr. STOKES, in intimating formally the result of the election, congratulated both Dr. Glover and the committee on the event, as it gave Dr. Glover the important and honourable position for which he had been a candidate, and it brought to the committee the satisfaction of having secured the return of a representative who knew his duties as a member of Council, and who, he felt sure, would perform those duties ably and well.

Dr. GLOVER thanked his committee, each and everyone, for their kind exertions on his behalf. To them and to his many supporters throughout England and Wales he owed his success—a success which had been gained in a way and by means that would bear scrutiny. Some of his supporters did not agree with him upon all points, but he trusted that by honest thought, consideration, and independence, they would be able to reach conclusions both just and equal. The points in his election on which he thought they might be congratulated were, that the freedom of the profession had been rigidly respected, that he had frankly indicated his own opinions on difficult subjects, and that the election had been conducted on quiet and inexpensive lines.

It was unanimously resolved that no part of the expense of the election should fall on Dr. Glover, but that it should be borne by his committee, and it was arranged that subscriptions for this purpose should be sent to Mr. G. T. Keele, 81, St. Paul's-road, Highbury, by whom they will be acknowledged.

Dr. GLOVER moved a vote of thanks to the chairman of his committee, Dr. Stokes, and to the hon. secs., Mr. G. T. Keele, Dr. Reid, and Mr. Fraser Stokes. He said that it had been a peculiar gratification to him that these important offices had been filled by his near neighbours, and had it not been for the support he had received from practitioners in his own immediate neighbourhood he should not have consented to come forward for such a post.

The resolution was cordially seconded by Sir Andrew Clark, who referred to Dr. Stokes as an exemplary chairman, than whom he had never seen a better. The resolution was unanimously carried, and a similar one, thanking Sir Andrew Clark for the energetic assistance he had given throughout the election, brought the proceedings to a close.

WILLS OF MEDICAL MEN.

THE will of Charles Chadwick, M.D., late of Broadwater Down, Tunbridge Wells, Sussex, who died on Aug. 30th last at Buxton, was proved on Nov. 1st by Mr. John Stone Wigg, the Rev. John Watkins, and Charles Montagu Chadwick, physician, the son, the value of the personal estate amounting to upwards of £92,000. The testator bequeaths £500, besides some furniture and effects, to each of his unmarried daughters; and his plate is to be divided between his children. The residue of his real and personal estate he leaves in equal shares to, or upon trust for, his nine children; but the amounts settled upon his unmarried daughters, and the amount advanced to one of his sons, are to be taken into account in the division.

The will of Henry Jewell, M.D., formerly of Sidmouth, but late of Salcombe Regis, Devon, who died on Aug. 27th last, was proved at the Exeter district registry on Oct. 18th, by Captain Edward Hennale, R.N., and Mr. Henry Whitworth Andrew, the executors, the value of the personal estate amounting to upwards of £8000. The testator bequeaths £100, and his plate, books, pictures, household furniture, and effects, to his wife, Mrs. Kate Jewell; an annuity to his sister, and legacies to his executors. The residue of his real and personal estate he leaves upon trust for his wife for life or widowhood, and then for his grandson, Edward Jewell Whitting.

The will of Mr. Francis Falwasser, Surgeon-Major, Medical Staff Corps, late of the North Camp Aldershot, Hants, who died on Feb. 4th last in India, was proved on Oct. 27th, by Colonel Francis Duncan, R.A., C.B., and Mr. Ernest Bateman Falwasser, the brother, the executors, the value of the personal estate amounting to upwards of £4000. The testator, after making some specific bequests to his brothers and sister, gives his furniture and effects to Mrs. Julia Alicia Madeline Murphy for life, and then for her three daughters. The residue of his property he leaves upon trust for Mrs. Murphy for life, then for the maintenance of her daughters under twenty-one, and ultimately for the daughters of his brother, the Rev. John Frederick Falwasser.

The will and two codicils of Robert Fowler, M.D., late of 145, Bishopsgate-street Without, and 12, Old Burlington-street, who died on Aug. 7th last at Hampstead-heath, were proved on Nov. 6th by Walter Fowler, B.M., F.R.C.S., the son, and Charles Jeken Elwin, the executors, the value of the personal estate exceeding £4000. The testator gives £100 and the lease of his residence in Old Burlington-street, with the furniture and effects, to his wife, Mrs. Judith Fowler, certain property in Shropshire to his said son, and other legacies. There are also some specific gifts of presentation plate to children. The residue of his real and personal estate he leaves to his three children, Walter, Harriet, and Margaret, in equal shares.

The will and codicil of Harvey Buchanan Holl, M.D., late

of 1, Derby Villas, Cheltenham, who died in September last, were proved on Oct. 11th by Mr. William Haworth Holl, the brother, and John Lawrance Longstaffe, the executors, the value of the personal estate exceeding £3700. The testator bequeaths the silver inkstand presented to him by the governors of York Hospital to his said brother. The remainder of the provisions of the will are in favour of his brother, and of Bennit Mason, Harvey Mason, and Annie Mason.

The will, with two codicils, of Walter Somerville, M.D., formerly of Greenfield, county Lanark, N.B., but late of Harrogate, who died on May 28th last, was proved on Oct. 26th by Mrs. Isabella Young Somerville, the widow, John McCasland McCulloch, and George Dalziel, three of the executors, the value of the personal estate in the United Kingdom amounting to over £2000. The testator gives an annuity of £60, to be subsequently increased to £1000, charged on his estate at Greenfield, to his wife; and the residue of his property equally among his children.

The will of Cosmo Gordon Logie, M.D., F.R.S.E., late of 47, Queensborough-terrace, Bayswater, who died on April 6th last, was proved on Oct. 11th by Mrs. Maria Logie, the widow and sole executrix, to whom he gives all his estate and effects.

The will and two codicils of George Miller, M.D., late of 6, Beaumont Villas, Spring-grove, Isleworth, who died on Aug. 31st last, were proved on Nov. 5th by William Hine Haycock, the sole executor. The testator, after making some bequests, leaves one-fourth of the ultimate residue of his property to his daughter Harriette Louisa, and three-fourths to his daughter Augusta Edwyna.

The following legacies have recently been left to hospitals and other medical charities:—Mr. Thomas Phillips Danson, of 54, Merton-road, Bootle, near Liverpool, £1000 to the Endowment Fund of the Bootle Borough Hospital, and £500 to the Liverpool Dispensaries.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Lambeth.—In the parish of Lambeth the birth and death rates for 1885 were 33·9 and 18·6 per 1000 respectively, the infant mortality under one year of age being at the rate of 131 per 1000 registered births. Amongst the zymotic diseases small-pox caused 85 deaths. As regards cases of this disease, it is stated that 509 came under notice, the districts in which it was most prevalent being Vauxhall and Stockwell. At Stockwell sixty-eight houses were invaded within half a mile of the Small-pox Hospital, the majority of the cases being, as in 1884, within the quarter-mile area. In 1884 Mr. Verdon brought forward some points which, in his opinion, militated against the theory of the aerial dissemination of the small-pox infection, and one of these was the fact that no cases had occurred in the forty houses situated upon the west side of Hargwyne-street, near to the hospital buildings. In 1885, however, the houses no longer enjoyed a similar immunity, and Mr. Verdon states distinctly that the districts in which the Asylums Board Hospitals are situated throughout the metropolis have in every epidemic suffered severely; there has, indeed, been an exceptional prevalence of small-pox in their vicinity. He, however, still believes that aerial dissemination is not the principal factor, and one of the points on which he relies as to this is the alleged comparative escape of children before vaccination. Thus he points out that 427 children were born within the half-mile area in the first six months of 1885, and he takes it for granted that as a rule such children would remain unvaccinated for about three months. From January 1st to July 28th, 293 cases of small-pox were admitted into the hospital, and no cases occurred amongst the children referred to except in two instances, where, it is alleged, the origin of the infection could be traced. Assuming that Dr. Verdon is correct, and that these two which he heard of were really all that did take place in a district where there is no compulsory notification, all he proves is that, whatever the means by which small-pox spreads, it did not, for some reason or other, operate to a large extent on these infants. But the argument is no stronger against aerial communication than against any other method of infection—as for example, sewer infection, which he seems, on insufficient grounds we think, to regard as a principal cause of small-pox spread. The percentage of deaths amongst the vaccinated was 6·7; amongst the unvaccinated it was 78·5.

St. Luke's.—Dr. Yarrow devotes a large portion of his report to the consideration of statistics, the interest of which is mainly local. The corrected death-rate for 1885 was 22·7 per 1000. Measles and scarlet fever were more than usually prevalent. The number of cases of "fever" appearing on the Poor-law officer's books are stated to have been 7 only, and this is compared with 766 in 1865. The precise meaning of this is not clear. It can hardly mean that only 7 persons in receipt of relief had fever in 1885, and if other cases are now removed to the Asylums Board Hospitals, and are hence eliminated from the Poor-law medical officer's books, the comparison does not hold good. A large amount of sanitary work is steadily in progress, regulations have been decided on as to houses let in lodgings, and a considerable portion of land is occupied with artisans' and labourers' dwellings.

Bethnal-green.—In an extensive account of the conditions of this district, in so far as they point to the need of nuisance inspection, Dr. Bate states that in the whole of the metropolis there are 103 nuisance inspectors, this giving a rough average of one inspector to 40,000 inhabitants. The variations are, however, great. Thus, Greenwich and St. Olave's each have only one inspector, the population of the first being 148,545, and that of the latter 10,000 only. In Bethnal-green there is one inspector to every 65,000 inhabitants, and difficulties have arisen as to their relationship to the medical officer of health. The death-rate for Bethnal-green during 1885 was 22·08 per 1000, and the birth-rate 39·96. In the matter of making arrangements with the Metropolitan Asylums Board for the isolation of non-paupers, the vestry decided that no action was necessary, because the persons removed from their district to hospital either were, or by reason of their illness became, paupers. We imagine that many sanitary authorities in London take the view that, as the metropolis has an isolation authority, there is no need for other bodies to take up the work. The new Washington Lyons disinfecting apparatus is giving every satisfaction; before it did so it required to be properly covered with some non-conducting material, in order to prevent the spoiling of certain articles by means of the condensed water from the steam.

Bath Rural District.—Dr. Harper's annual reports on this district generally show a steady amount of sanitary work, and that for 1885 forms no exception. The death-rate was higher than usual—namely, 17·0 per 1000, but the increase was due to deaths amongst elderly people in the suburbs of Bath. Tiverton is evidently a portion of the district which needs substantial sanitary improvements. This last report refers to it again as having been the scene of nine fatal and thirteen non-fatal attacks of diphtheria, and it is stated that the people lived in damp stuffy dwellings, amongst a variety of insanitary conditions. We learn that sewer ventilation and refuse removal have been improved; the improvement has come none too soon, and we hope it may continue. During the summer months the authorities themselves undertook the removal of refuse in the populous parts of Tiverton and Weston, but it appears to have been of a restricted character. The removal ought to have been general, and where it is professedly undertaken by the authority, occupiers should test the matter by resort to measures indicated under Sect. 43 of the Public Health Act. But it would be still better if, in all the more populous parishes, scavenging were always carried out by the authority, and not imposed on occupiers, who have no means of properly carrying it out. When diphtheria was prevalent, considerable precautions were resorted to, and we are glad to find that the isolation hospital was useful both for this disease and other infectious fevers.

Birmingham.—During the third quarter of the present year diarrhœa was accountable for 543 deaths, or 86 per cent. of the gross number in the group of zymotic diseases, this rate being somewhat lower than that for 1884, but nearly double that for the summer of last year. During 1885, August and September were exceptionally cool, and the contrast which the two years exhibit leads Dr. Alfred Hill to remind his

readers that he has frequently dealt upon the obvious connexion between summer diarrhœa and a high temperature. He also records the mean temperatures of the third quarters of 1884, 1885, and 1886 as 61·4°, 58·0°, and 60·1° respectively, and shows that the corresponding death-rates from diarrhœa per 1000 persons—namely, 5·3, 2·2, and 5·0—again bear out this view. With regard to the deaths from this cause during the past quarter, they were nearly all in children under two years of age, no less than 76 per cent. being under one year of age, and those under five years amounting to 96 per cent. of the total, leaving only a percentage of 4 to be distributed among the remainder of the population.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5551 births and 3529 deaths were registered during the week ending Nov. 27th. The annual death-rate in these towns, which had been 18·2, 19·5, and 19·1 per 1000 in the preceding three weeks, rose last week to 20·2. During the first eight weeks of the current quarter the death-rate in these towns averaged 19·1 per 1000, and was 2·3 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 13·4 in Brighton, 13·7 in Birkenhead, 15·3 in Derby, and 15·6 in Sunderland. The rates in the other towns ranged upwards to 26·2 in Bristol, 26·7 in Wolverhampton, 26·7 in Halifax, and 29·5 in Norwich. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 411 and 402 in the preceding two weeks, further declined last week to 400; they included 144 from measles, 75 from scarlet fever, 55 from "fever" (principally enteric), 54 from whooping-cough, 37 from diphtheria, 35 from diarrhœa, and not one from small-pox. No death from any of these zymotic diseases was registered last week in Brighton or in Birkenhead; whereas they caused the highest death-rates in Preston, Huddersfield, Wolverhampton, and Leeds. The greatest mortality from measles occurred in Halifax, Leeds, Huddersfield, and Wolverhampton; from scarlet fever, in Liverpool, Bradford, Sheffield, and Blackburn; from whooping-cough, in Leeds and Norwich; and from "fever," in Manchester, Norwich, Plymouth, and Bolton. The 37 deaths from diphtheria in the twenty-eight towns included 24 in London, 2 in Birmingham, 2 in Liverpool, 2 in Halifax, and 2 in Newcastle-upon-Tyne. Small-pox caused no death in London and its outer ring, or in any of the twenty-seven large provincial towns. Only 2 cases of small-pox were under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease. The deaths referred to diseases of the respiratory organs in London, which had been 293, 321, and 346 in the preceding three weeks, further rose last week to 413, but were 61 below the corrected average. The causes of 83, or 2·3 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bradford, Sunderland, and in five other smaller towns. The largest proportions of uncertified deaths were registered in Blackburn, Oldham, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 20·1 and 21·4 per 1000 in the preceding two weeks, was again 21·4 in the week ending Nov. 27th; this rate was 1·2 above the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 16·3 and 16·4 in Leith and Perth, to 23·9 in Aberdeen and 25·3 in Glasgow. The 528 deaths in the eight towns last week were within one of the number in the previous week, and included 17 which were referred to whooping-cough, 17 to diarrhœa, 14 to scarlet fever, 8 to "fever" (typhus, enteric, or simple), 4 to diphtheria, 4 to measles, and not one to small-pox; in all, 64 deaths resulted from these principal zymotic diseases, showing a further decline from 81 and 77 returned in the preceding two weeks. These 64 deaths were equal to an annual rate of 2·6 per 1000, which was 0·3 above the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 17 and 19 in the previous two weeks, declined again last week to 17, of which 13 occurred in Glasgow and 2 in Aberdeen. The deaths attributed to diarrhœa, which had declined in the previous five weeks from 46 to 21, further fell last week to 19, and included 6 in Glasgow, 5 in Dundee, and 3 in Edinburgh. The deaths from scarlet fever, which had been 16, 23, and 24 in the preceding three weeks, fell last week to 14, of which 9 occurred in Glasgow, 2 in Dundee, and 2 in Aberdeen. The 8 deaths referred to "fever," of which 4 were returned in Glasgow, exceeded the number returned in the previous week by 2. The 4 fatal cases of diphtheria and measles scarcely differed from the numbers in the previous week; 3 deaths from each of these two diseases occurred in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had increased in the preceding five weeks from 79 to 137, declined again last week to 125, and were no fewer than 46 below the number in the corresponding week of last year. The causes of 71, or nearly 14 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 26·2, 23·6, and 24·5 per 1000 in the preceding three weeks, rose again to 25·3 in the week ending Nov. 27th. During the first eight weeks of the current quarter the death-rate in the city averaged 23·5; the mean rate during the same period was 17·5 in London and 18·9 in Edinburgh. The 171 deaths in Dublin last week showed an increase of 5 upon the numbers in the previous two weeks, and included 7 which were referred to scarlet fever, 7 to "fever," (typhus, enteric, or simple), 4 to diarrhœa, 3 to whooping-cough, 1 to diphtheria, and not one either to small-pox or measles. Thus 22 deaths resulted from these principal zymotic diseases, against 32, 23, and 20 in the previous three weeks; they were equal to an annual rate of 3·3 per 1000, the rates from the same diseases last week being but 1·8 in London and 0·8 in Edinburgh. The fatal cases of scarlet fever, which had been 15 and 10 in the previous two weeks, further declined last week to 7. The 7 deaths referred to "fever," on the other hand, exceeded the numbers returned in recent weeks; while those from diarrhœa and whooping-cough scarcely differed from those in recent weeks. Two inquest cases and one death from violence were registered; and 57, or a third, of the deaths occurred in public institutions. The deaths both of infants and of elderly persons showed a considerable increase upon the numbers in the previous week. The causes of 18, or more than 10 per cent., of the deaths registered during the week were not certified.

SANITARY CONDITION OF JAMAICA.

The report of the Registrar-General of Jamaica upon the vital statistics and health of that island in the year 1884-85, signifying the year ending 30th September, 1885, has recently come to hand. We must once more enter a protest against the obvious depreciation in the value of the report from the fact that it does not deal with the complete year ending December, and thus afford comparison with similar statistical reports relating to others of the West Indian Islands, and to other British colonies. The estimated mean population of Jamaica in the year 1884-5 is 596,383; it is pointed out, however, that emigration to the Isthmus of Panama during the last two or three years, for the purpose of the Canal, has resulted in a net loss to the population of more than 20,000 persons, almost exclusively male adults, and equal to one-fifth of the male population at the reproductive ages. The effect of this depletion of the population upon its marriage, birth, and death rates must be considerable. The recorded marriage-rate in Jamaica is always low, and was in 1884-5 equal to 10·0 persons married per 1000 of the population, corresponding with the rate in the preceding year. The birth-rate was 37·8 per 1000, and it is worthy of note, as an exceptional fact, that the births of females exceeded those of males. Bearing in mind the large proportion of male adults temporarily absent, the birth-rate is very high. In connexion with the low marriage-rate, the high rate of illegitimacy is very noticeable. In the year under notice the proportion of illegitimate births was equal to 59·9 per cent. of the total births, and differed but slightly from the mean proportion in the preceding six years. The death-rate in the island was equal to 22·6 per 1000, and was almost identical with the rate in the preceding year. The proportion of infant mortality, bearing in

mind both the climate and the excessively large proportion of illegitimacy, must be considered low. The deaths under one year of age were equal to 159 per 1000 of the recorded births, a rate which compares favourably with that recorded in most European countries. In dealing with the statistics of the causes of death we are faced with the fact that in but 2449 of the 13,500, or only 18·1 per cent., of the deaths recorded in the year had there been any medical attendance during the last illness, and therefore only in this proportion of cases was there any professional evidence of the cause of death. Under these circumstances, the statistics of causes of death are of doubtful value, and doubt is suggested whether the recorded deaths can even approximately represent the actual number of deaths that occur in the island. It will suffice to note that 4098 of the 13,500 deaths in the year were classed to zymotic diseases, including 2139 from undistinguished forms of fever, and 295 from "fever" distinguished as enteric, simple continued, typhus, cerebro-spinal, intermittent, remittent, yellow, or malarial. The deaths referred to measles, scarlet fever, diphtheria, and whooping-cough were comparatively few, but it is quite possible that fatal cases of these diseases may, under the circumstances, have been returned under the heading "fever undistinguished." It is sufficiently noteworthy that while the death-rate from all causes in Jamaica is said not to exceed 22·6 per 1000, the rate from zymotic diseases appears to have been equal to 6·9 per 1000, or nearly a third of the entire mortality. The more than doubt that exists of the value of these statistics of causes of death in Jamaica does not encourage further reference to the rates of mortality from different diseases in the island.

Correspondence.

"Audi alteram partem."

THE MEDICAL COUNCIL AND MR. W. H. H. DAY.

To the Editor of THE LANCET.

SIR,—As an article on, and a report of, the proceedings of the General Medical Council as regards the case of myself and Mr. Davenport appeared in your issue of the 20th inst., which is calculated to leave an injurious impression on the minds of your readers as to my conduct, and to misrepresent me to the profession, I must request your insertion of the following statement, which I have tabulated for the sake of brevity:—

1. Although the practice in Westminster is mine in law, and consequently I am entitled to the profits thereof, I have never touched a farthing of them, as my connexion with that practice has been one of principle and not of profit.

2. I deprecate most strongly the singling out from the large army of "sine diploma" men throughout the country for the purpose of prosecution—without previous warning—of a man who has passed the Final Examination of the Royal College of Surgeons of England in *Surgery*.

3. I hold that this act, as well as being contrary to the spirit of fair-play supposed to animate most Englishmen, was calculated to lower the prestige of the College as an examining body before the public.

4. I hold that it is little short of a public scandal that a post-mortem examination should be made and an inquest held on the body of a person who had been seen by two qualified men and a student who had passed the College Final in Medicine and Surgery two days before his death.

5. The late Drs. Moxon and Mahomed held the same opinion as myself as to the impropriety of this prosecution: the former having spent some time at the police-court for the purpose of testifying in the defendant's favour; and the latter having written a letter, which is now in my possession, in which he deplores the fact of Mr. Davenport having been made the subject of a prosecution, says he is not the sort of person against whom the law against unqualified practice was intended to be set in motion, and finally speaks of him as being *in fact*, if not *in law*, *"a well-trained surgeon or medical man, in the ordinary sense of the word."*

6. I have forwarded to the Branch Council for England, to whom my case was referred, a full explanation of my conduct, in which I have pointed out to them that as the "unqualified person" in question has passed the same examination on the strength of which in 1878 I received my diploma, and they admitted me on to the Register, he can hardly be considered as "unqualified" within the meaning of their resolution of April, 1883.

7. Under that resolution the Council have no power against me, as I have not practised in Westminster "for gain."

8. I am not attempting to argue that Mr. Davenport is a legally qualified man, but I do claim that he has not been treated with the courtesy due to a full-curriculum student who has passed four-fifths of his Final, but as though he were some dispenser or herbalist who, presuming on his knowledge of drugs, had attempted to act as attendant on the sick.

9. Such being the opinion I formed on the justice of this prosecution, I have loyally endeavoured, at great trouble and expense to myself, so to identify myself with the Westminster practice that the conduct of it should not be open to the censure of anyone. This I did in defence of a friend against whom I considered a great injustice had been done in, i.e., expecting him to qualify immediately.

10. It was the account of the prosecution in the daily papers which brought me forward in defence of my friend, and under no other circumstances should I have dreamt of allowing him to act as my assistant under circumstances which might perhaps be open to misconstruction.

11. While not arguing that I have acted wisely in this affair, or attempting to defend my action in the abstract, I at the same time deny that I have done anything to justify the use of such words as "criminal," "misconduct," and "Public Prosecutor," in connexion with my name, and I am quite willing to leave the profession to form their own opinion on my conduct.

12. As regards my being represented as the proprietor of a dispensary, no one can deplore more than I do the system under which a medical man is expected to supply "advice and medicine" for about half the sum that a druggist would charge for the medicine alone.

13. I hope the publication of this will lead to the expression of some opinions on this most unique case.

I remain, Sir, your obedient servant,

WALTER H. H. DAY, M.B. Trin. Coll. Toronto, M.R.C.S., L.R.C.P. Edin.

East Dulwich, S.E., Nov. 29th.

*** The terms to which Mr. Day takes exception were not used by us, nor did we quote or allude to them in our editorial remarks. We readily accept Mr. Day's explanations of the motives which weighed with him in permitting his name to be used in connexion with the dispensary at Westminster. They are of a kindly nature, and dissociated from motives of "gain." We cannot accept all his argument about the legal or moral position of Mr. Davenport, which, again, is not at present under consideration. It is obvious that a man must either be qualified or unqualified; the door of the profession must either be "open or shut." However near being qualified, if not legally so, he must be treated as unqualified.—ED. L.

THE APOTHECARIES' SOCIETY AND THE CONJOINT SCHEME.

To the Editor of THE LANCET.

SIR,—I am delighted with the letter of "Ye Humble Apothecarie" in your last number, and am very pleased to believe that in the far past the apothecary was of higher status than the surgeon. My question, however, is not answered by him, and I venture to repeat it: "Is not an L.S.A., who has taken no other diploma, *at the present time* in every practical sense a practitioner of an inferior grade?" I have no doubt whatever that the reply must be Yes, and that at the present time every L.S.A. who can obtain an additional qualification does so.

I would further point out that the Apothecaries' Society, by passing gentlemen on a minimum curriculum and a minimum examination, performs a very useful duty, and that should it depart from its present function, quasi-physicians and surgeons from over the Border, with innumerable letters appended to their names, will flock in greater numbers into our large towns, and take the places now well filled by "apothecaries." The typical practitioner of the

past generation was an M.R.C.S. Eng. and L.S.A; that of the near future will be the M.R.C.S. Eng. and L.R.C.P. Lond.; but we must have an inferior grade if unqualified assistants and prescribing chemists are not to take away a large slice of our bread-and-butter. Why should not this inferior grade be able to obtain an English diploma? If the Conjoint Examining Board in England admit the Apothecaries' Society, the latter can only ask for an unequal authority and the nomination of two or three examiners in materia medica. Do the promoters of the present agitation really desire for it such an impotent position—one which for all practical purposes means its extinction?

I am, Sir, yours obediently,

Dec. 1st, 1886. L.S.A. (with other qualifications).

MEDICAL ATTENDANCE ON THE POOR.

To the Editor of THE LANCET.

SIR,—Another attempt is about to be made by the Metropolitan Medical Provident Association to attract public attention to the subject of the medical treatment of the working classes in London—a subject whose vast importance to the profession it is difficult to exaggerate. Sir Spencer Wells and I have signed a circular of invitation to a meeting for this purpose on Tuesday, Dec. 7th, at 4 P.M., at the rooms of the Society of Arts, in John-street, Adelphi, at which the attendance of all medical men interested in this question will be welcomed. Perhaps you will allow me to explain that this meeting is intended to be one for genuine consultation. Our object is not to recommend the scheme of provident dispensaries, which is now being worked by the above-mentioned Association, but to ascertain if possible if that or any other scheme will command sufficient support from the public and the profession to place the medical attendance on the poor upon a footing more satisfactory to reason and justice. The provident dispensaries have been greatly discredited by the prevalence of "bogus" dispensaries which have assumed the title of "provident," while they are really cheap doctor's shops, and are used as a means of evading the regulations of the Colleges as to advertising, and they no doubt, like other human institutions, have their own intrinsic drawbacks. We have only supported them hitherto as on the whole the best practical step known to us towards the solution of the problem. But we invite the attendance of the opponents as much as that of the friends of that scheme, provided they come prepared to co-operate with us in our real object—which is, I repeat, not to establish provident dispensaries, but to devise some means of relieving the medical profession and the poor from the evils of the present system. May I add that such a reform can only be carried out by the exertions of the medical profession themselves. We have found plenty of persons ready to criticise our proposals, but few hitherto who have given any practical suggestions, and fewer who would spend their own time and labour on the attempt. All medical men practising among the poor complain of the increasing difficulty of making a living, due chiefly to the competition of gratuitous institutions, and of the private "dispensaries" and "sick clubs." We invite them now to join us in our earnest endeavour to introduce a better state of things.

I am, Sir, your obedient servant,

Great Cumberland-place, Nov. 29th, 1886. T. HOLMES.

WORKHOUSE INFIRMARIES AND CLINICAL STUDY.

To the Editor of THE LANCET.

SIR,—With reference to your comment on the very able memorandum of Mr. Vallance, for the improvement of the medical administration of the Whitechapel Infirmary, and the advantages that would accrue from a modification of existing arrangements, I can thoroughly endorse a great deal that has fallen from the pen of that gentleman; but the question is a very vexed one, and one that requires mature consideration, on account of the peculiar and dual control in the administration of these institutions. As regards the visiting staff and the resident medical officer, you state that he (the resident medical officer) would be placed to the said visiting staff as he is to the Board of Guardians. Such would be very anomalous, as how would the visiting staff be placed as regards the guardians—would they be under the control of the Board? If not, how about expenditure for drugs, stimulants, instruments, &c.? Such would be beset with difficulties when the resident medical officer presented his estimate for the consideration of the Board. Touching the visiting staff, you say, Appoint a visiting physician and surgeon. How about the special diseases—viz., eye, women, &c.: would you have specialists for them also? I cannot but think there is not sufficient material for a visiting physician, much less a visiting surgeon. A great part of the patients who seek admission to the infirmaries are people suffering from the dire effects of an ill-spent life—viz., the three D's (dirt, destitution, and drink). It is perfectly wonderful the effect of ablution, H.D., and a regulated diet; in fact, dietetics play a most important part in the treatment. Such cases, I maintain, are not cases for a visiting physician. The other medical cases, as well as surgical, are not such that the medical superintendent, along with his assistant medical officer, could not manage under existing circumstances, with credit to themselves and the profession, as well as to the patient. The cases that do require any special treatment, whether medical or surgical, can always be relieved after due consultation of the medical superintendent and his assistant that such a case requires the attention of a hospital physician or surgeon. It must be borne in mind that the medical superintendents and the assistant medical officers at the present time are men who take a great interest in their work, and keep up the work of the day. Concerning the nervous diseases, the majority of the cases are usually sent from hospitals as incurable (here again diet plays a most important part); in fact, if the institutions went under the designation of "hospitals for the incurable and infirm poor," it would be more appropriate than their present appellation of "union infirmaries." If any cases are obscure, the special physicians and surgeons are only too willing to give their aid. As to students, there is really not sufficient to induce a diligent student to come, as he can always find sufficient work in his hospital—that is, if he be a student of medicine and not a medical student; if they do not attend our special hospitals, much more would they shun our infirmaries. Touching the instruction of nurses, could not the medical superintendent, in conjunction with his assistant, give them all they require? Besides, the nursing staff are not solely confined to attendance on the sick; they have other duties to perform which do not fall to the lot of a hospital nurse—viz., serve dinners, look after clothing, &c., which absorb a great portion of their time. The whole thing is replete with difficulties. The course, I think, most feasible to pursue would be to have a consulting physician and surgeon, and after the medical superintendent and the assistant medical officer have consulted concerning the case, and have come to the conclusion that it is a fit case for a consultant, let them send for him. I may add, in conclusion, that great credit is due to Mr. Vallance for the lucid and able manner in which he has brought forward his scheme; the Whitechapel Board are to be congratulated on such a clever and efficient officer.

I am, Sir, yours &c.,

City of London Infirmary, E., Nov. 1886. W. GEM.

THE FELLOWS AND MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—Will you allow me to suggest a scheme by which most of the differences between the Fellows and Members of the College of Surgeons might be set at rest. I do not recollect to have seen such a proposal before, but it may possibly have escaped me. It is that the Fellows should be entitled to two votes each on all College matters, and the Members to one. I would make all offices and honours tenable by either, and all should be subject to election. A certain number of the members of Council should be elected periodically, and there is little doubt but that Fellows would generally be chosen; or, if not, that old and respected Members, who should be equally welcome to the Board, would be selected instead. Of course the inequality of voting power would cease if a Member were elected.

With regard to the College of Physicians, it seems to me that a great error has been committed by the Council. There are Fellows and Members here also who appear to me (*pace*

Mr. Erichsen) to correspond in degree to the same classes in the other College; and as in the latter all are surgeons, so in the former all are physicians. But those who possess merely the licence to practise are surely not physicians, though they call themselves so; and if such title is assumed by the consent of the two higher classes, it is quite time the matter is authoritatively looked to. There is not a corresponding body amongst surgeons at all to this class.

With regard to the title of "Doctor" I cannot see any just or sufficient reason why its value should be depreciated by allowing its assumption by any who have not passed some examination other than that for surgeon or general practitioner, though I would be quite willing to grant it to any who subjected themselves to some examination of this sort, having first qualified by a surgical and medical examination as at present.

The claim of the Apothecaries' Society to a share in the power of examining for an entrance into the profession is as good, or better, than that of either of the Colleges. For many years it was far more dreaded than the examination of the College of Surgeons, and that of the College of Physicians is much younger. Long may it still exist and flourish.

I am, Sir, yours truly,

Nov. 1886. L.S.A., M.D., F.R.C.S.

THE CHARTER OF CHARLES I.

To the Editor of THE LANCET.

SIR,—There are several legal points connected with the present position of affairs and with the existing Charters on which it is desirable that the Council, if they have not already done so, should take legal opinion, and Mr. Erichsen would render a real service to the College by urging upon the Council that the opinion of the solicitor to the College should be published on the following points:—

1. Whether the right to hold lands and houses to the value of £2000 a year is given by the Charters to the Members of the College or to the Council?

2. Whether the Council have not largely exceeded the limit of £2000 a year?

3. Whether the Council have thereby incurred any penalties under any Statute of Mortmain, and if so what; and whether such penalty falls on the Council or on the College?

4. Whether there is any authority in the Charters for the Council holding lands or houses conjointly with the College of Physicians?

I trust Mr. Erichsen will not dissent from the view that this is a reasonable request.

I am, Sir, yours faithfully,

November, 1886. H. NELSON HARDY.

THE M.CH. DEGREE.

To the Editor of THE LANCET.

SIR,—When the attention of the medical profession is being directed towards reform and removing anomalies, it seems a fitting occasion to direct attention to a distinct grievance which a large number of the profession suffer from, and to agitate for its removal. It is a palpable injustice to the holders of the degree of Master in Surgery that, in the case of a large number of hospitals and infirmaries, that degree does not qualify them to apply for the post of hon. surgeon.

A representation from the Medical Council to the governing boards of the hospitals in question would no doubt have the effect of inducing them to alter a superannuated rule not consonant with the times, and which is a plain injustice to a large number of well-educated and competent surgeons. In the majority of cases these rules were framed at a time when the degree in question was either non-existent or but little known. Such is not now the case, and it is time that the rules were changed to meet the altered circumstances. A representation such as I have suggested would doubtless be successful where the personal efforts of the comparatively small number of the holders of the degree would be inadequate.

I am, Sir, your obedient servant,

Nov. 1886. M.CH.

LONDON SEWAGE.

To the Editor of THE LANCET.

SIR,—Advertisements are now being circulated seeking tenders for the construction of *additional* tank room at Barking, in order that Mr. Dibden may have greater space for his chemical experiments, which practical men regard as worthless in relation to the ultimate solution of the great sewage question.

The cost of the additional works required at the present outfalls, according to the joint report of the engineer and chemist of the Metropolitan Board, was £1,140,000, involving a charge on the ratepayers of £34,000 a year. Yet such is the rapid growth of population in the metropolis, particularly in the east, that it is stated on good authority that 65,000 persons are now being added yearly to a population already numbering five millions, so that it is quite certain that both Barking and Crossness will in a few years be densely surrounded with population and dwellings. Let me point out that this expenditure of £1,140,000, great as it is, cannot prevent the condemnation of the present outfalls in a very few years. It appears, therefore, to be a monstrous waste of good money sanctioned by certain members of the Board, who resolutely refuse to consider anything else, although Messrs. Jones and Denton's Canvey Island scheme has much to recommend it, and although they offer to place all their plans and details before a competent independent engineer, when they say they can prove that their proposal, if adopted, would save the metropolis one-half the outlay resulting from chemical treatment.—Yours faithfully,

Nov. 1886. OBSERVER.

"THE LIABILITY OF FRIENDLY SOCIETIES FOR EXTRA MEDICAL ASSISTANCE."

To the Editor of THE LANCET.

SIR,—I find on page 1044 of THE LANCET for Nov. 27th, 1886, a paragraph under the above heading, and as the information contained in the paragraph is *untrue* and calculated to damage the reputation of the Nottingham Friendly Societies' Medical Institution, I hope you will contradict the report in your next issue. 1. The action in the County Court was *not* taken by Dr. Collins against the Friendly Societies' Medical Institution, but against the patient himself. 2. Dr. Collins was *not* an officer of the Nottingham Friendly Societies' Medical Institution. 3. The Nottingham Friendly Societies' Medical Institution had two *doubly qualified* medical officers engaged on the staff at that time, the second gentleman (Dr. Rodgers) being fully competent to perform the operation. 4. Whenever the Nottingham Friendly Societies' Medical Institution has engaged the services of medical men the Committee has paid them punctually and liberally.—I am Sir, yours respectfully,

Nottingham, Nov. 29th, 1886. J. LEE, Secretary.

LIVERPOOL.

(*From our own Correspondent.*)

THE MAYOR AND THE ROYAL SOUTHERN HOSPITAL.

FOLLOWING the annual custom of more than forty years, the newly elected mayor, Mr. James Poole, attended the morning service at St. Barnabas' Church on the 21st inst. (the second Sunday after his election), when a sermon was preached by Archdeacon Gore, and a collection was made on behalf of the funds of the hospital. The collection realised £101. After the service the Mayor visited the hospital, which is within a short distance of St. Barnabas, accompanied by some of the medical staff, and the aldermen and city councillors, who had attended service.

HOSPITAL FOR INFECTIOUS DISEASES.

A correspondence has taken place between the Town Clerk and the Local Government Board in regard to the erection of a hospital for infectious diseases in Grafton-street. Subject to some slight alteration in the plans as to the position of the ambulance shed at the proposed hospital,

the Local Government Board has given its sanction to the borrowing of £15,000 by the Corporation for the erection of the hospital on the Grafton-street site.

CORONERS' INQUESTS IN LIVERPOOL DURING THE YEAR 1885-86.

The annual report of the Head Constable of Liverpool gives, amongst other interesting details, a table of the inquests held before the city coroner from Sept. 30th, 1885, to Sept. 29th, 1886. The total number was 615, in addition to which there were 695 other cases of death reported to the coroner by the police and others, thus making a total of 1310 deaths investigated by the coroner during the year. As might have been expected, the greater proportion of inquests were held on the bodies of males, the number of these being 376, and that of females 239. Among the causes of death indicated in the verdicts there were 60 deaths due to "natural causes," 5 from "want, cold, and exposure," 5 from "disease aggravated by neglect," 49 from "excessive drinking," 57 "found dead," 46 from "injuries, cause unknown," 41 from "other causes," 33 from "suicide," 4 from "manslaughter," and 5 from "murder."

A YEAR'S ACCIDENTS IN LIVERPOOL.

Another table gives the number of accidents in Liverpool during the same period, which reached a total of 2137. Of these, 411 persons were run over by carts, cars, &c., the accidents being fatal in 17 cases. There were 383 cases of falling into docks, canals, &c., of which 22 only were fatal, showing the promptitude with which lives are saved by the police and bystanders. There were 29 cases of burning, of which 3 were fatal. Firearms caused 5 accidents, of which 1 was fatal. There were, as might have been expected, many accidents resulting in injuries in dock works, on dock quays, and on board vessels in docks, the numbers being respectively 5, 122, and 224; of these only 7 ended fatally.

PROPOSED NEW MORTUARY.

Allusion has been made in previous letters to the dead-house situated at the Prince's Dock, near to the principal landing-places of the River Mersey, and in a position, central and otherwise, convenient for its purpose. But the structure is in every respect unfit even for the bare purpose of affording shelter for the dead bodies deposited in it, and still more so for the necropsies, which frequently have to be held in it under conditions involving the greatest discomfort to the medical examiners. It is satisfactory therefore to say that there is now some prospect of a new mortuary being erected, with every reasonable modern improvement.

Liverpool, Nov. 30th.

MANCHESTER.

(From our own Correspondent.)

THE HOSPITALS.

IT was recently stated in these columns that the Royal Infirmary had not lately received any very large benefaction. Since then it has, however, received under the will of a late alderman no less a sum than £10,000. In acknowledging the munificence of this bequest, the chairman of the Board, on Monday last expressed a hope that the public would not imagine that the infirmary was thus in any way less needful of support, and stated that the banking account was overdrawn to the extent of more than £25,000. Amongst the other hospitals that have benefited under Mr. Rose's will are the Salford Royal and St. Mary's. To the latter is bequeathed £2000, which will be very acceptable in view of the present efforts to raise money for the reconstruction or rebuilding of the hospital. The bazaar lately organised on behalf of this fund by the ladies employed on the staff of the Manchester Post-office realised nearly £400. This bazaar is believed to be the first in the kingdom got up and managed entirely by the *employées* of the postal service. The Salford Hospital received £5000 under the same will, and, seeing that £11,000 has already been paid on account of the extensions now going on, will prove very acceptable. At the annual meeting held on Nov. 17th it was stated that the annual expenditure had been £4120, against an income of £4429, leaving a balance of £300, a rather unusual thing in these days of hospital financial difficulties. It is hoped that the new buildings will be ready for use early in the coming year.

SCARLET FEVER.

The epidemic of scarlet fever shows at present but little sign of abatement, and it is fortunate that no other infectious disease is prevalent at the same time, as the hospital accommodation available for these diseases is now almost fully utilised. At a late meeting of the Manchester Board of Guardians, the Local Government Board inspector alluded to the occurrence of some cases of that disease amongst the children in the Swinton Schools belonging to the guardians, and criticised adversely the present arrangement for isolation, &c., of patients suffering from any infectious disease there.

LECTURES.

The Manchester and Salford Sanitary Association commenced their annual series of lectures last week, when the first of the series was delivered by Dr. Ransome, on some "Preventable Causes of Disease." The meeting was presided over by Mr. Councillor Pingstone, and it is an encouraging sign of the times to note how much more interest has of late been taken by many of our city councillors in the spread of sanitary knowledge amongst the masses of the people. The Combe lectures on Digestion, delivered by Professor Stirling at Owens College during the present session, have been very successful, and attended by large audiences. A hope has been expressed that in the future some arrangements may be made by which these shall be open to others beside students of the College.

THE MEDICAL SOCIETY.

A meeting of considerable interest has just been held at the College, several uncommon surgical cases being brought forward. A case of cholecystotomy was shown by Mr. Jones, and a patient on whom supra-pubic lithotomy had been performed was introduced by Dr. Cullingworth. Other cases were an ununited fracture of the clavicle in which the fragments had been wired, and a patient (shown by Mr. Southam) in whom the upper end of the humerus had been removed for a malignant growth. A paper on Summer Diarrhœa, with special reference to its possible bacterial origin, was read by Dr. H. Tomkins, who during the past summer had been studying this disease in Leicester, than which no town in England affords more ample opportunity for the work. This paper showed that in those parts of the town specially affected the air was far more abundantly loaded with germs than in other districts. Cultivations of microbes had also been made from various organs of the bodies of patients dead from diarrhœa.

The authorities have lately been successful in the Queen's Bench in reducing the rateable value of the Owen's College buildings from £3285 to £1083.

Manchester, Dec. 1st.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

BONE-SETTING.

AN inquest was held last week on the body of a sailor from North Shields, aged fifty-eight years. It appeared from the evidence that the deceased, on Oct. 23rd, had, in throwing a rope, fell and dislocated his arm at the shoulder-joint. In the words of a witness, he had been since then "bothering on with a bone-setter," who at last told him he could do no more for him, leaving the arm still unreduced. On the 17th of this month he was taken to the Newcastle Infirmary, where efforts were made at reduction under chloroform. Dr. Arnison, the senior surgeon, deposed that on the conclusion of one of these attempts the armpit was seen to swell up and fill with blood, showing that some vessel had given way. He failed to find the bleeding vessel, but believed it to be deep behind the misplaced bone. The hæmorrhage was stopped by other measures. At night it broke out again, and he was sent for by the house-surgeon, when the wound was opened and a vessel secured. Dr. Arnison remained with the man until 1.30 A.M., when all bleeding had ceased. The next evening, however, it recommenced, but he was then too weak to have anything further done, and died from exhaustion consequent upon repeated bleeding. Dr. Arnison, in his evidence, further said that probably the bloodvessel had formed adhesions to the bone and was torn in using the necessary force to get the bone reduced. He had never

in his experience met with a similar case, but he knew such had happened in the practice of several eminent surgeons.

SHERBURN HOSPITAL.

In a previous letter I gave you some particulars as to the working of this ancient and useful charity. Since then an inspector from the Charity Commissioners has held an inquiry at the hospital with a view to the permanent increase in the amount for its maintenance. It was stated that the expenditure had increased of late, and the governors of the institution asked that the income might be permanently augmented by £650, thus bringing the amount of the income to £5500. It is hoped that the inspector may report favourably to the Commissioners.

ALCOHOLIC POISONING OF INFANTS.

It is well known, and has been frequently pointed out, that the working-classes of Sunderland feed their children most improperly. In "bad times" they get nothing, or next to nothing, and suffer from hunger; when "good times" come round they get everything, including alcoholic drinks. An inquest was held last week on a child, aged three months, which had slept with its mother, but was found dead beside her in the bed. It was shown by the evidence that the infant was "fed" on condensed milk and breast milk, but that on the advice of "a neighbour" it was also given a teaspoonful of gin "occasionally." The dangerous nature of giving alcohol to tender infants was forcibly pointed out by the coroner in this case, as it has been often done before in similar cases in Sunderland.

WHOOPING-COUGH.

At a late meeting of the Hexham Local Board the medical officer, Dr. Jackson, pointed out the influence of whooping-cough in swelling the mortality-rate in Hexham, where it had been prevalent for some months, although the public thought little of it; and the sufferers did not receive that attention which the seriousness of the disease merited, and as a consequence the deaths from it were more numerous than from other infectious diseases which were in themselves more serious. No doubt many infants perish from whooping-cough and its complications whose lives might be saved by timely medical treatment.

INFECTIOUS DISEASES IN NEWCASTLE.

The returns from practitioners to the medical officer of health prove that the scarlet fever epidemic in Newcastle shows no sign of abating. During the last fortnight a total of 109 cases of infectious disease were reported, of which 92 were from scarlet fever, and 15 from typhoid or enteric fever.

Newcastle-on-Tyne, Nov. 30th.

EDINBURGH.

(From our own Correspondent.)

UNIVERSITY UNION FANCY FAIR.

On Tuesday the Marquis of Lorne inaugurated the monster bazaar and fancy fair, which is now being held in Edinburgh to raise funds for a University Union, which it is proposed to found on a basis similar to that of the Unions of Oxford and Cambridge. The efforts that have been made during several months with a view to securing success in this enterprise have been unremitting, and have engaged the energies of a very wide circle of the community interested in the University and its undergraduates. As far as the appearance of the bazaar is concerned, they have been crowned with great success; for the largest covered space in Edinburgh, the Waverley market, capable of holding nearly 20,000 people, has been converted into a gorgeous palace for the occasion, stocked with valuable wares from all parts of the world, including large consignments of native products from the Cape, Australia, India, and America. A series of large stalls, each with a distinctive name, and a special fancy uniform for the attendants, are ranged around the transfigured market-place; their arrangement and the sale of the goods being undertaken by a number of Edinburgh ladies, who represent the chief influences of our academic and city life. At the stalls and in the spaces between them are stationed a representative array of the youth and beauty of Edinburgh; the young ladies in fancy costumes varying according to the special stall at which they preside, and the students in the gallant costume of Queen Mary's reign. The spectacle presented by the varied array of stalls, arbours, kiosks, shows of all kinds, shooting galleries, all the paraphernalia of a country fair, which occupies one part of the market, of a theatre, a lecture room, and the bright decorations and gay costumes, is quite unique, and will certainly not be forgotten for many a day; and the good results of all the efforts which have been made, should the Union prove as successful as it bids fair to do, will be of lasting benefit to the University in providing it with what has as yet been missing in Edinburgh—a common bond in our undergraduate social system.

THE ROYAL INFIRMARY.

The managers of the Royal Infirmary have elected Mr. James W. B. Hodsdon, F.R.C.S.Ed., to the vacant post of assistant-surgeon. In securing his services upon the staff of the institution, they have made an acceptable and a useful appointment. His training in surgery has been very varied and unusually comprehensive; he is known as a good teacher, and is popular alike amongst students and patients; and as he has also the reputation of being an able experimentalist and an original thinker, his appointment will add considerably to the teaching power of the Edinburgh School, and tend in due time to enhance its reputation.

Edinburgh, Nov. 30th.

IRELAND.

(From our own Correspondent.)

ROYAL UNIVERSITY OF IRELAND.

In reference to the recent regulations for the medical curriculum of this University, published in last week's LANCET, I may add that the date at which this rearrangement of the medical course shall be brought into operation has been ordered by the Senate as follows:—(*a*) All medical students who shall not have passed the first examination in medicine prior to Nov. 1st, 1887, shall come under the operation of the whole of this new regulation. (*b*) Medical students who shall have passed the first examination in medicine prior to Nov. 1st, 1887, shall be required to pass subsequently the second examination in medicine as at present, in the four subjects of anatomy, physiology, chemistry, and pharmacology. (*c*) Should any candidates qualified to present themselves for the M.B. examination desire to be allowed the privilege of availing themselves of the division of subjects of examination mentioned in No. 7, they will be allowed to do so even during the coming year. (*d*) All medical students who on Sept. 29th, 1887, shall not be of more than two years' standing as medical students shall come under the operation of the new regulations as to the third and fourth years of medical studies. (*e*) Where prior to the promulgation of this scheme courses of lectures or hospitals have been attended in an order consistent with the existing regulations, but not in the order prescribed in this scheme, certificates of such attendance will be accepted. But after the promulgation of this scheme all attendances at courses of lectures and hospitals must take place conformably with the regulations herein set out.

THE ENTRIES AT THE DUBLIN MEDICAL SCHOOLS.

The following is the return of anatomical students for t present session:—

School.	Session 1886-7.	Session 1885-6.
Trinity College	225	220
Ledwich	217	212
Carmichael	181	179
Royal College of Surgeons ...	129	130
Catholic University	80	101

From these figures it will be seen that compared with last session there is an increase of five at Trinity College and at the Ledwich respectively, and of two at the Carmichael. On the other hand, there is a decrease of twenty-one at the Catholic University, and of one at the College of Surgeons.

ACADEMY OF MEDICINE IN IRELAND.

The inaugural address at the opening meeting of the Obstetrical Section of the Academy last week was given by the President of the Section, Dr. A. V. Macan, who selected for his subject, "Bimanual Examination in the Diagnosis of Female Affections." A vote of condolence with the family of the late Dr. Henry, a member of the Academy, was proposed by Dr. Kidd, seconded by Dr. Kirkpatrick, and adopted by the members of the Section.

MERCER'S HOSPITAL, DUBLIN.

A meeting of the governors of this institution was held last week to investigate certain charges made against the working of the hospital by Mr. Newcomen, late deputy resident pupil, and who had been refused admission to the hospital. While Mr. Newcomen was on duty one night a patient named Farrell was admitted, and a dispute arose between the acting resident pupil and the matron and house-surgeon, in reference to the alleged ill-treatment the patient received, and who died shortly afterwards. Charges were brought by Mr. Newcomen against those officials, and the committee met on Oct. 18th last, and came to the conclusion that the charges brought by Mr. Newcomen and the widow of the deceased were not proved, and that the former should be prevented from entering the hospital again. Mr. Newcomen applied to have the matter reinvestigated by the board, and in consequence of a summons to appear, he attended at the hospital on a day last week with counsel to assist him. The governors, however, refused to admit his counsel, and the proceedings were conducted in private, when the board passed a resolution that Mr. Newcomen's letters be marked read, and that no further notice be taken of them.

DEATH OF STAFF SURGEON O'SULLIVAN, OF H.M.S. "BELLEISLE."

This gentleman, who was attached to the *Belleisle* at Kingstown Harbour, died very suddenly on Sunday night while leaving a house in Dublin, where he had been dining. He complained when about to take his departure of feeling unwell, and immediately fell on the floor. The nearest surgeon was sent for, and on his arrival pronounced Surgeon O'Sullivan to be dead. Deceased, who was a graduate in medicine of the Queen's University in Ireland, was about forty years of age, and is supposed to have succumbed from thoracic aneurysm.

ZYMOTIC DISEASES IN DUBLIN.

The two zymotic diseases which for some time past have prevailed in Dublin are scarlatina and typhoid fever. Of the latter about forty deaths have been recorded during the last three months, and almost the same number have succumbed from scarlatina during the past four weeks.

HEALTH OF CORK.

During October the death-rate was much lower than for the corresponding month of last year, or any previous year on record. Typhoid fever is still increasing, but the type of the disease seems to be of a mild character. The medical officer of health in his recent report refers to the necessity of having the principal main sewers in the city ventilated.

Dublin, Nov. 30th.

PARIS.

(From our own Correspondent.)

THE ADULTERATION OF WINE.

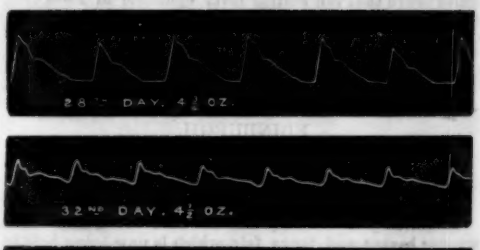
AFTER a long and laborious discussion extending over several sittings, the Academy of Medicine has delivered itself of an opinion on the question of the adulteration of wine by the addition of alcohol. The original conclusions of the committee have undergone some modifications, and now stand as follows:—The Academy, advising from a hygienic point of view, declares:—1. That the *vinage* or alcoholisation of wine by pure alcohol to the extent of two degrees may be permitted, but beyond this it should be absolutely forbidden. 2. The addition of alcohol is not only dangerous by its quantity and by the bad quality which is often used, but also because it leads to the practice of "watering," which is at the same time a fraud and an adulteration. 3. The so-called "higher" alcohols considerably increase the dangers of brandies and liqueurs, and it is reasonable to require that the spirits used for the fabrication of these products should be absolutely pure. 4. The Academy calls the attention of the authorities to the necessity of restricting the number of retail drink-shops, and of putting into force the laws for the repression of drunkenness. It would appear that the addition of two degrees of alcohol is necessary for the preservation of certain wines of low strength, and as it is very doubtful whether such admixture can be detected, the Academy may be congratulated on the wisdom of this authorization. Some of the speakers would have prohibited the addition of alcohol to all wines over ten degrees, and a motion of M. Gauthier to this effect was voted, but a few minutes later, at the suggestion of M. Brouardel, the vote was negatived.

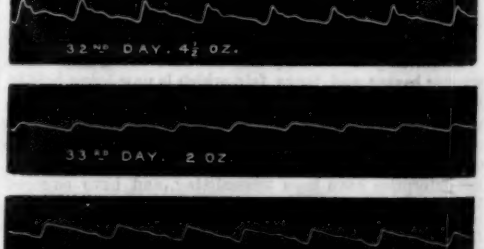
THE DISEMBARKATION OF TROOPS FROM THE EAST.

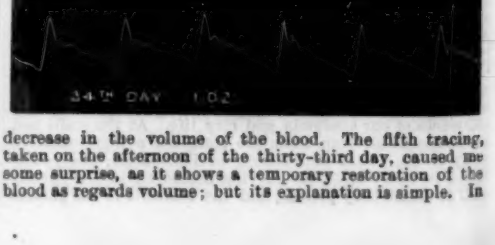
Another question of State hygiene is now occupying public attention, but in this case the Government has acted without consulting its sanitary adviser, and hence a storm of timely expostulation. Hitherto the troops returning from the East have been disembarked at Port Gros, which is at a safe distance both from Marseilles and Toulon. This station having been suppressed from financial considerations, recent arrivals have been permitted to land without any quarantine observation; but in consequence of the remonstrances of the representatives of the interested ports, who feared a fresh invasion of cholera, the Government has decided that passengers from suspected countries shall be subjected to observation at the lazaret of Frioul, a couple of miles from Marseilles. After the disembarkation of the passengers the ships are to proceed with their crews to Toulon. The town of Marseilles has suffered much of late years in its commercial prosperity, and it is feared that the near neighbourhood of an inefficient quarantine station may cause it to be considered as an infected port abroad, and so injure its maritime trade. The vicinity of the lazaret is also thought to be a real permanent danger to the town, and the Chamber of Commerce is making strong representations on the subject to the Government, and it is hoped that the measure will be reconsidered.

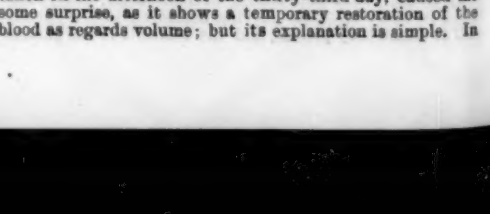
MERLATTI'S PAST.

Whatever may be the pathological signification of the first four tracings of Merlatti's pulse (on the twenty-fourth, twenty-eighth, thirty-second, and thirty-third days), there can be no doubt that they indicate a progressive









decrease in the volume of the blood. The fifth tracing, taken on the afternoon of the thirty-third day, caused me some surprise, as it shows a temporary restoration of the blood as regards volume; but its explanation is simple. In

reply to my observation that such a tracing was not possible unless a large quantity of fluid had been quite recently absorbed, Dr. Maréchal informed me that Merlatti had been visited during the day by some of the leading members of the profession, and that, with a view to ascertain the condition of the stomach, he had been made to swallow three litres of water, and a further quantity had been taken during the afternoon. The conclusion of the medical visitors and of the committee was that the heart was normal, that the muscular system was still satisfactory, and that there was no urgency about putting an end to the fast. It may be stated that the enumeration of the blood-corpuscles showed four and a half million cells to the cubic millimetre, an increase of half a million over the first enumeration; but it must be remembered that the quality of blood has immensely decreased, and although the cells still bear the same proportion to the fluid, the total number has greatly decreased, and it is probable that if an enumeration had been again made, it would have given a very different result. My own opinion differs from that of the committee. Merlatti's pulse has varied in rapidity a good deal; certainly between 56 and 76; there is a reduplication of the second sound, and the pulse tracing indicates a similar dynamic condition of the circulation to that found in aortic insufficiency. But what appears still more significant is the odour of the breath (which is stated to be like that of a carnivorous animal), and which reminds me strongly of the odour in some cases of mental disturbance. Merlatti's determination is to achieve his fifty days' fast *quand même*. Indeed, he states that any opposition of the committee will only strengthen his resolution, and he has even hinted that it will lead him to prolong his abstinence until the 1st of January.

Paris, Dec. 1st.

THE SERVICES.

WAR OFFICE.—The Queen has been graciously pleased to approve of the following promotions being conferred upon the undermentioned officers in recognition of their services during the operations in the Soudan, 1885-86:—Surgeon-Major Henry William Alexander Mackinnon, of the Army Medical Staff, and Surgeon-Major Charles Sibthorpe, of the Indian Medical Department, to be Brigade Surgeons.

INDIA OFFICE.—The Queen has approved of the following promotion made by the Government in India:—Brigade Surgeon George Farrell, C.B., of the Bengal Medical Establishment, to be Deputy Surgeon-General.

ADMIRALTY.—The following appointment has been made: Surgeon Henry F. Jackson, to the Royal Marine Depôt at Walmer (temporarily).

ARTILLERY VOLUNTEERS.—1st Kent: Acting Surgeon J. I. Boswell resigns his appointment.—3rd Lancashire: Surgeon A. A. Corte is granted the honorary rank of Surgeon-Major.—2nd Middlesex: Surgeon and Honorary Surgeon-Major R. T. Daniell resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the corps on his retirement.

RIFLE VOLUNTEERS.—6th Lanarkshire: Acting Surgeon J. E. Fairlie resigns his appointment.—2nd Oxfordshire: Acting Surgeon E. Cotterell resigns his appointment.

THE VOLUNTEER MEDICAL STAFF CORPS (The London Division).—Valentine Matthews, Gent., to be Surgeon.

HOSPITAL SATURDAY FUND.—At a meeting of the Board of Delegates of this fund held on the 27th ult., it was reported that the amount now in hand, after payment of all expenses, reached £9500, and that a considerable sum was yet outstanding. The aggregate to hand from the workshops is at least £500 in excess of last year, and the expenses show a decrease of £250. It was resolved that a sum of £9750 be distributed, and that the fund be closed for the present year. Lord Brassey was elected president of the fund in the place of the late Mr. Samuel Morley. A proposal for registering the fund under the Friendly Societies Act was deferred for consideration.

THE twelfth annual general meeting of subscribers to the Glasgow Western Infirmary was held on the 25th ult., when a satisfactory report was submitted by the secretary and adopted by those present.

Obituary.

MORTIMER BALDING, B.A., M.D. CANTAB, M.R.C.S.,

OF ST. ALBANS, HERTS.

MORTIMER BALDING was the youngest son of the late Mr. James Balding, of Barkway, Herts, who, himself a medical practitioner, lived to see three of his children engaged in the active pursuit of the same profession. One only of these, the eldest, now survives—Mr. D. B. Balding of Royston, who was recently nominated as a fitting representative of the general body of the profession upon the Medical Council. Mortimer was born in 1850, and received his early education at the hands of the Rev. A. E. Fowler, of Saffron Walden. In October, 1867, he entered Gonville and Caius College, Cambridge, and graduated B.A. in honours (Nat. Sci. Tripos) in 1870. He attended Addenbrooke's Hospital, and after taking his first degree in medicine proceeded to London to complete the medical curriculum at the Middlesex Hospital, where two brothers had been educated many years before. He passed through his studentship with much credit, gaining the esteem of his teachers, and always evincing the energy and honesty that characterised him throughout life. In 1873 he held the office of house-physician, throwing himself with ardour into clinical pursuits. Throughout the ten years that elapsed between his leaving London and finally settling down in country practice, he was engaged in professional work with but little intermission, either in holding travelling appointments or in taking charge of the practices of medical friends who were fortunate in securing the services of one whom they could so implicitly trust. His last travelling appointment was as medical attendant to the late Earl Grosvenor, when that nobleman visited the Marquis of Lorne, then Governor-General of Canada. Dr. Balding's services were called into requisition during this visit on the occasion of the sleigh accident to H.R.H. Princess Louise. On returning home he devoted several months to the preparation of his M.D. thesis, which was read in November, 1880. The subject he selected was "Hydatid Disease of the Liver: its Diagnosis and Treatment." It was based upon his own experience, as well as upon a careful study of recorded cases.

In January, 1883, he succeeded to the practice of the late Dr. Prior of St. Albans, and in a very short time fulfilled the most sanguine expectations of his friends as to his success. Doubtless his long training and experience in general practice stood him in good stead, and no prospect could be brighter than his at the beginning of the present year. He had married in September, 1885, and might well have anticipated a life of continued and increasing usefulness and prosperity. His career, which had opened so brightly, was, however, destined to be abruptly closed. In the spring he began to suffer from symptoms which must be undoubtedly ascribed to the malady that terminated his life; although it was not until the middle of August, after he had vainly sought to recruit his failing health by a holiday, that the existence of malignant disease of the rectum was ascertained. The fortitude with which he bore the information whereby his worst fears were realised was the wonder and admiration of his friends; and, indeed, throughout the remainder of his days he acted as few men have either the character or the courage to act in presence of a death-warrant. So long as he was able, he continued to visit his patients, and for several weeks had the advantage of the assistance of his old friend, Mr. Hughes, formerly of Bromley, Kent, whose presence and kind help were great comforts to him. Immediately on learning the nature of his illness he took steps to dispose of his practice, which eventually resulted in a partnership with Mr. A. H. Boys, who succeeds him. In October colotomy had to be performed, but the local disease continued to make rapid progress, and he sank from exhaustion on November 23rd.

Thus, at the early age of thirty-six, died a member of our profession of whom the world at large knew little, but whose sterling qualities of heart and character endeared him to

many, who saw in these qualities—hidden somewhat by an unconventional manner and plainness of speech—the making of a thoroughly upright and trustworthy man. For Mortimer Balding possessed original characteristics which mark out the individual from the ordinary conventional type; and his own rectitude of conduct led him to be earnest and outspoken in condemnation of all shams and quackery. His position and success were the outcome of his character, coupled with valuable gifts of method and foresight in the conduct of affairs. The large gathering at the graveside on the 26th ult. bore silent yet eloquent testimony to the hold he had gained on the hearts of the people by his steady devotion to duty and generous dealing in the few years he had practised his profession among them.

S. C.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on Nov. 27th:

Abbott, William Louis, L.R.C.P. Lond., Philadelphia.
Darlow, Alfred, L.S.A., Redcliffe House, Plasket, Essex.
Gibbard, Thomas Wykes, L.S.A., Wellingborough.
Lewis, David Thomas, L.S.A., Stoke Newington-road.
O'Reilly, George Hartley, L.S.A., Wyndham House, Reading.
Pedley, George Aston, L.S.A., The Terrace, Camberwell.
Quarty-Papafio, Benj. W., M.B. Edin., Gold Coast, W. Africa.
Redman, William Edward, L.S.A., Steep-hill, Lincoln.
Thorpe, Frank, L.K.Q.C.P.I., Queen's-road, Oldham.
Young, Richard Weekes, L.S.A., Sydney, New South Wales.

CAMBRIDGE UNIVERSITY.—At a congregation held on the 25th ult., the degree of M.B. was conferred on the following gentlemen:—

Evan Evans, King's. | Chas. Silvested Evans, Clare.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the Court of Examiners, held last week, the under-named was admitted a Fellow of the College:—

Thomas Falkiner Falkiner.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise, on Nov. 25th:—

Browne Henry, M.R.C.S., Cromwell-road, Westbourne-park.
Davey, Thomas George, Helston, Cornwall.
Goodall, Henry, M.R.C.S., Abingdon Villas, Kensington.
Jeaffreson, John Leslie, Park-crescent, Stoke Newington.
Johnson, John George, Lansdown-road, Clapham.
Lansdale, William, M.R.C.S., Chelsham-road, Clapham.
Marshall, Arthur Lumsden, Bournemouth.
Moxon, Alfred, Easenhall, Rugby.
Phillips, G. Gordon Owen, Castletown-road, West Kensington.
Routh, William, Irvine House, Balham-park-road, Balham.
Ward, John Alfred, Ilwarardine Castle, Montford, Shropshire.
Yeoman, Wm. Metcalfe, M.R.C.S., Osmotherley, Northallerton.

THE annual Hospital Sunday collection at Hereford was held on the 28th ult.

THE Goole Cottage Hospital Saturday collection was made on the 27th ult.

THE annual dinner of the Birmingham medical students was held on the 25th ult.

A BAZAAR in aid of the fund for the building of the Mater Misericordiæ Hospital is announced to be held in Dublin on the 15th inst.

THE new infirmary at Workington, which has been built at a cost of about £3000, was formally opened on the 29th ult.

THIRTY-TWO designs have been sent in for the new workhouse hospital which the Belper Board of Guardians contemplate erecting.

A SPECIAL general meeting of the members of the Liverpool Medical Institution will be held to-night (Friday) to receive the report of the Hospital Inquiry Committee.

ON the 27th ult. Mr. B. Thompson Lowne, F.R.C.S., delivered a lecture on "Volcanoes and Earthquakes" at the Working Men's College in Great Ormond-street.

THE death on the 23rd ult. of Mr. J. W. Inger is announced. The deceased, who was in the twenty-ninth year of his age, had practised in Nottingham for six years.

AT a special meeting of the Barnsley Union Rural Sanitary Authority on the 30th ult., the medical officer reports the prevalence to a considerable amount of typhoid fever in Royston.

SUICIDE OF A RUSSIAN SURGEON.—M. Kolomnin, Professor at the St. Petersburg Surgical Academy, is reported to have committed suicide after having failed in the performance of a dangerous operation.

ON the 26th ult. a farmer was fined £10 for sending from Linton, in Cambridgeshire, to the London Central Meat Market the carcases of two sheep which were diseased and unfit for food.

ST. BARTHOLOMEW'S HOSPITAL COLLEGE.—The Preliminary Scientific Exhibition of £50 for one year, open to students of less than six months' standing, has been awarded to Messrs. Sargant and Langford (bracketed equal).

AT a special meeting of the Ripon Millenary Executive Committee on the 29th ult. it was recommended that the question of establishing a cottage hospital in that city be taken into consideration, in connexion with the Queen's jubilee, at a general meeting of the inhabitants to be called by the mayor as early as possible next year.

QUEEN'S COLLEGE, BIRMINGHAM. — An Ingleby Scholarship, after examination in obstetric medicine and surgery, and the diseases of women and children, open to students who have completed two years, has been awarded to Mr. A. H. Nott. There were no competitors for the Sydenham or Queen's Scholarships.

MEDICAL WOMEN FOR INDIA.—Miss E. Littlewood, L.R.C.P. & S. Edin., has started for Bombay. She has received the appointment of resident medical officer to the Cama Hospital for Women, opened by Lord and Lady Reay on July 31st, of which Dr. Edith Pechey and Dr. Charlotte Ellaby are the physicians.

THE TRAINED NURSES' ANNUITY FUND.—By the kind permission of the Countess of Carnwath a meeting of the committee of the Trained Nurses' Annuity Fund was held at her house in Cromwell-place on the 23rd ult., when Mrs. Bell was elected from fourteen candidates to the Albany Annuity, specially founded in memory of the late Duke of Albany, who was president of the Society.

AT a public meeting held at Bournemouth on the 29th ult., it was decided to commemorate the Queen's jubilee by the erection of a general public hospital, to be called the Victoria Hospital. An influential committee was appointed to collect subscriptions and arrange the details.

ST. MARY'S HOSPITAL.—On the 27th ult. a special dramatic performance was given at the Novelty Theatre in aid of the Maternity Fund of this institution. The piece selected was "New Men and Old Acres." As the theatre was well filled, it is satisfactory to know that the hospital in whose favour the undertaking was so successfully carried out will be a considerable gainer.

IN the calendar issued by the Council of the Yorkshire College for the current academical year, it is hinted that there is every probability of the formation in Leeds of a bearer company of the Volunteer Medical Staff Corps. The idea has now assumed a definite form, and there is no doubt that in a short time such a company will have been fairly established.

SALE OF MICROSCOPICAL PREPARATIONS.—The sale of Dr. Matthews' fine microscopical preparations, first-rate microscopes and objectives, &c., is announced for Friday, Dec. 10th, at 12.30, at 31, King-street, Covent-garden, W.C. Dr. Matthews was an ex-president of the Quekett Club.

PRESENTATION.—An illuminated address, a clock, and ornaments were on the 23rd ult. presented to Mr. Ilott, the late medical superintendent of the Whitechapel Infirmary by the officials engaged at that institution.

FIRST AID.—The women's class in connexion with the St. John Ambulance Association, conducted by D'Arcy B. Carter, Esq., M.R.C.S. Eng., was examined in the "First Aid" course on the 8th ult. by Edward Atkinson, Esq., M.R.C.S. Eng., F.L.S., of Leeds, when twenty-five candidates presented themselves for examination, the whole of whom were successful.

LECTURES ON AIR POLLUTION.—The Manchester and Salford Noxious Vapours Abatement Association has arranged for a series of free lectures, with a view to directing public attention to the evils resulting from the present excessive pollution of the air of Manchester and Salford by coal smoke and vapours from chemical works and other places where offensive trades are carried on. The lectures are to be given by Mr. Carter Bell, Dr. Ransome, Mr. Estcourt, and others.

MEDICO-PSYCHOLOGICAL ASSOCIATION.—The following gentlemen, having passed the examination held at Bethlem Hospital on Nov. 29th and 30th, will receive the certificate in Psychological Medicine—viz., T. B. Hyslop, Bethlem Hospital; James Neil, Warneford House, Oxford; Walter Pearce, Maidenhead; Alan Rigden, County Asylum, Bicton Heath, Shrewsbury; G. M. Robertson, Montagu-street, Russell-square; J. Walter Scott, Fareham, Hants; Percy Smith, Bethlem Hospital; G. D. Symes, County Asylum, Dorchester.

GREAT NORTHERN CENTRAL HOSPITAL.—On the 30th ult., Mr. G. C. T. Bartley, M.P., presided over a meeting, at Holloway Hall, which had been called to consider ways and means with regard to the Great Northern Central Hospital, which it is proposed to erect in the Holloway-road. The site has been purchased at a cost of £7000, and £5000 towards the building is in hand; but £43,000 are still required. A committee of thirty, with power to add to their number, was appointed for the special purpose of collecting funds; Mr. Bartley, M.P., being chairman.

BRITISH MEDICAL TEMPERANCE ASSOCIATION.—At a meeting of this Association held on the 30th ult., an address was delivered by the president, Dr. B. W. Richardson, on "The Public-house and the Public Health," medical officers of health having received special invitations. At the close of the address a discussion ensued, in which Dr. Norman Kerr, Dr. Pearce, and others took part, and it was agreed to memorialise the Government to institute an inquiry into the extent of disease and mortality produced, directly or indirectly, by the public sale of intoxicating drinks.

ROYAL HOSPITAL FOR INCURABLES.—On the 26th ult. the thirty-second annual meeting of the friends of this institution was held, when the report, which was read by the secretary, Mr. F. Andrew, showed that at the present time 673 persons are dependent on the funds of the charity, about 190 of whom are inmates of the hospital. The year's receipts, including dividends, £2202; deposit at bank, £6180; subscriptions, donations, and bequests, £22,793, amounted to £35,736. Of this sum £11,866 were spent on the hospital, £9920 on pensions, £3391 on general expenses, and £5000 invested, leaving a balance of £5201. During the year a seaside home in connexion with the asylum has been opened at St. Leonards, and to this house 90 of the most suitable cases have been sent in parties of five or six.

ROYAL SOCIETY.—At a meeting on the 30th ult. the following medals were presented:—The Copley Medal to Franz Ernst Neumann of Königsberg, for his researches in theoretical optics and electro-dynamics; the Davy Medal to Jean Charles Galissard de Marignac of Geneva, for his researches on atomic weights; the Rumford Medal to Professor Samuel P. Langley, for his researches on the spectrum by means of the bolometer; a Royal Medal to Mr. Francis Galton, for his statistical inquiries into biological phenomena; and a Royal Medal to Professor Peter Guthrie Tait, for his various mathematical and physical researches. Professor Michael Foster was afterwards elected one of the treasurers, and Professor David Ferrier and Arthur Gamgee, M.D., members of the council, for the ensuing year.

QUEEN'S COLLEGE, BELFAST. — The following scholarships have been awarded:—Fourth year (Anatomy and Physiology): Wm. Weatherup. Third year (Medicine): J. M. Hall, R. W. Haslett. Second year: Hamilton Morton, James Taylor. First year: S. M'C. Killen.

SEASONABLE DONATIONS.—Mr. Edward Kelley, late of York-street, now of 5, Broadway, Westminster, has given through Dr. Fenton, in memory of his late wife, £400 to each of the following institutions: Westminster Hospital, the Western Dispensary, Rochester-row, and Miss Sharman's Orphans' Home, West-square, S.E.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ANNINGSON, BUSHELL, M.D.Cantab., has been reappointed Medical Officer of Health for the Cambridge Urban Sanitary District.

ARUNDELL, SHIRLEY W., M.R.C.S., L.S.A., has been appointed Medical Officer for the Eleventh District of the Wisbeach Union.

ATKINSON, FRANCIS EDWARD, L.R.C.P.Lond., M.R.C.S., has been reappointed Medical Officer of Health for the Haworth, Oakworth, Oxenhope, Silsden, and Skipton Urban Sanitary Districts; and the Keighley, Settle, and Skipton Rural Sanitary Districts.

FRASER, THOMAS, M.A., M.B., has been appointed Assistant-Physician to the Crichton Royal Institution, Dumfries.

HUGHES, B. A., M.R.C.S., L.R.C.P., has been appointed Clinical Assistant in the Skin Department of the North-West London Hospital.

HUNT, EDGAR A., M.R.C.S., L.R.C.P.Ed., has been appointed Surgeon to the Essex and Colchester Hospital.

KARKEEK, P. Q., M.R.C.S., L.S.A., has been appointed Medical Inspector for Torquay, under the Workshops and Factories Act, vice Chilcote, deceased.

LANGLEY, AARON, L.R.C.P.Ed., L.R.C.S., has been appointed Medical Officer for the Eighth District of the St. Saviour's Union.

LING, C. A. S., M.R.C.S., L.S.A., has been appointed Medical Officer for the Twelfth District of the Tendring Union.

LISTON, HENRY, L.R.C.P., L.R.C.S.Ed., has been appointed Honorary Medical Officer to the Sunderland Hospital for Sick Children, vice Mordey Douglas, M.R.C.S., L.R.C.P.Ed., appointed Consultant.

MELVILLE, H. B., M.B., C.M., has been appointed Assistant Physician to the Crichton Royal Institution, Dumfries.

MITCHELL, ROBERT, M.A., M.B., C.M.Edin., late House-Surgeon, Dewsbury, and District General Infirmary, has been appointed House-Surgeon to the Memorial Hospital, Jarrow-on-Tyne.

RAWSON, EDWIN ELSWORTH, L.R.C.P.Ed., M.R.C.S., L.S.A., has been reappointed Medical Officer of Health for the Thornton Urban Sanitary District, Yorkshire.

STARK, ARTHUR C., M.B., C.M.Ed., has been appointed Medical Officer for the First District of the Alderbury Union.

WATSON, WILLIAM CHARLES, L.R.C.P.Ed., M.R.C.S., has been reappointed Medical Officer of Health for the Hoole Urban Sanitary District, Cheshire.

WILLS, W. A., M.B.Lond., M.R.C.S., has been appointed House-Surgeon to the Victoria Hospital for Children, Chelsea, vice P. D. Turner, M.B.Lond., resigned.

Births, Marriages, and Deaths.

BIRTHS.

FLEURY.—On Oct. 11th, at Montevideo, the wife of Luis A. Fleury, M.D., of a son.

PIRRIE.—On the 26th ult., at Redcliffe-gardens, South Kensington London, the wife of J. M. Gordon Pirrie, M.D., of a son.

MARRIAGE.

WITHERS—BRYSON.—On the 27th ult., at St. Simon's, Southsea, Robert Withers, M.R.C.S., of Lawrence, Otago, New Zealand, to Isabella Jane, eldest daughter of Colonel T. Bryson, Chief Paymaster (retired), Army Pay Department.

DEATH.

SMYTH.—Recently, at Bergamo, Alto, North Italy, Robert Beresford Smyth, M.D., M.S., Surgeon-Major, A.M.D. (retired), aged 61.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

Medical Diary for the ensuing Week

Monday, December 6.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M. and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 3 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
ROYAL INSTITUTION OF GREAT BRITAIN.—5 P.M. General Monthly Meeting.
SOCIETY OF ARTS.—8 P.M. Mr. Lewis Foreman Day: The Principle and Practice of Ornamental Design (Cantor Lecture).
ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—8 P.M. Casual communications by Messrs. J. H. Mummery, W. Hern, J. H. Redman, G. Cunningham, A. P. Reboul, W. St. G. Elliott, and Dr. J. Walker. Mr. Cunnington: Pre-historic Skulls from Tumuli in Wiltshire.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. William Adams: The Advantages of Gymnastic Exercise in the Horizontal Position in the Treatment of Lateral Curvature of the Spine.—Mr. H. Allingham: On a New Method of Excision of the Knee.—Dr. Keser: A case of Intra-peritoneal Hæmorrhage in a newly-born Child.

Tuesday, December 7.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Hime (Bradford): Researches concerning Pasteur's Prophylactic.—Mr. Crookshank: Flagellated Organisms in the Blood.—Dr. S. West: Epithelioma of Larynx.—Dr. Hadden: Disseminated Fibrosis of Lungs.—Dr. Silcock: Addison's Disease associated with Cystic condition of Pineal Body.—Dr. Seymour Taylor: Included Ovum.—Mr. Sydney Jones: Malformation of Hand (living subject).—Dr. Pye Smith: Ulcerative Endocarditis of the Right Side of Heart. Card Specimens by Mr. Sydney Jones, Mr. E. H. Fenwick, Dr. H. Sainsbury, Dr. Herringham and Mr. D'Arcy Power, Mr. Shattock, Dr. Hadden, Dr. Hebb, and Dr. Pasteur.

Wednesday, December 8.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Mondays and Thursdays, 9.30 A.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.: and Saturday, 1 P.M.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9 A.M.; Saturday, same hour.
SOCIETY OF ARTS.—8 P.M. Major-General C. B. Webber, R.E., C.B.: Glow Lamps, their Use and Manufacture.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Ordinary Meeting.
EPIDEMIOLOGICAL SOCIETY OF LONDON.—8 P.M. Dr. J. Edward Squire: Typho-malarial Fever.
HUNTERIAN SOCIETY.—8 P.M. Dr. Pye-Smith: Observations in Prognosis.
BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown by Dr. George Elder and others. Dr. Routh: On the Etiology and Diagnosis from a Medico-legal point of view of some cases of Nymphomania.

Thursday, December 9.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Living and Card Specimens at 8 P.M. Mr. W. Adams Frost: Case of Symmetrical Swellings in position of Lacrymal Glands.—Dr. Beevor: Case of Ophthalmoplegia Externa without any other Symptoms.—Mr. A. St. Clair Buxton (introduced): A Pocket Refraction Case.—Mr. W. H. Jessop: (1) Atrophy of Iris; (2) Lamellar Cataract exhibiting marked triradiate arrangement.—Mr. A. Quarry Silcock: Choroidal Hæmorrhage in region of Macula. Papers:—Mr. W. T. Jackman (introduced): Results of an Examination of the Eyes of School Children.—Dr. W. A. Brailey: Hydatid Cyst of Orbit.—Dr. J. A. Ormerod: Ecchymosis and Œdema of Eyelids without obvious cause.—Mr. Edgar A. Browne: Case of supposed Quinine Amaurosis.—Mr. W. H. Jessop: Case of sudden and lasting Lateral Nystagmus.

Friday, December 10.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CLINICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Herringham: Two cases of Diphtheritic Paralysis, Affections of Heart, and Choreic Movements.—Mr. Treves: On Acute Myositis.—Dr. Montague Murray: On a case of Gastric Ulcer with unusual complications.—Dr. Samuel West: Right Hemiplegia, with slight Rigidity and Aphasia, occurring during a Paroxysm of Whooping-cough, subsequently passing into a condition of Athetosis.

Saturday, December 11.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, December 2nd, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Nov. 26	30·33	E.	48	46	...	50	43	...	Overcast
,, 27	30·48	E.	45	44	...	49	44	...	Overcast
,, 28	30·20	W.	46	44	...	50	44	...	Cloudy
,, 29	29·82	W.	50	49	...	52	45	...	Raining
,, 30	29·66	W.	39	38	...	46	37	...	Overcast
Dec. 1	29·95	W.	35	33	...	45	32	...	Hazy
,, 2	29·80	N.W.	32	30	...	30	30	...	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

SCURVY IN SERPENTS.

M. MAGITOT has recently described to the French Académie des Sciences a disease he has observed amongst snakes which is analogous to scurvy, there being inflammation of the mouth, abscesses, hæmorrhages, ulceration, shedding of teeth, cutaneous ecchymoses, and inflammation of the cervical glands. The causes seem to be overcrowding, dampness, cold, and bad hygienic conditions. A bacillus, too, has been found which M. Pasteur looks upon as the morbid agent. Most of the snakes affected with the disease succumb to it; but by timely care and astringent applications to the mucous membrane of the mouth some may be saved.

A Poor Student.—The decision is not a new one. The vaccination instructors are appointed by the Privy Council, and their certificates only are allowed to be accepted by the examining boards.

Enquirens.—Our Students' Number of September last will afford the information desired.

M. O. H.—The report can be obtained of Knight & Co., Fleet-street, E.C.

Enquirens.—Mr. Jukes de Styrap has written a book on the subject.

FISSURED TONGUE.

To the Editor of THE LANCET.

SIR,—In answer to "A Young Practitioner," I beg to state that I have been successful in treating four or five cases as follows:—The application twice a week of the solid nitrate of silver to the base of each fissure, after the application of a four-per-cent. solution of cocaine, to prevent pain. Internally the biniodide of mercury and potassic iodide. Thus: R. Sol. hydrarg. bichlor., ℥j.; potass. iodid., ʒss.; ferri ammon. citrat., ʒj.; sp. æther. chloric., ʒij.; aquam ad ℥viii. One tablespoonful every four hours.

I am, Sir, your obedient servant,

Nov. 29th, 1886. C. R. ILLINGWORTH, M.D.

To the Editor of THE LANCET.

SIR,—If "A Young Practitioner" in the case of his patient will try the effect of the local application of a solution of nitrate of silver (thirty grains to the ounce), combined with the internal administration of iodide of potassium, in gradually increasing doses, I venture to think he will soon see an improvement. He has not stated whether there is a history of syphilis or not.

I am, Sir, yours truly,

November 30th, 1886. B. H.

"WINES" IN NEW YORK.

DR. CYRUS EDSON, of the New York Health Board, has recently analysed some of the "wines" sold in America; and with regard to the process of manufacture adopted by one prominent firm of extensive growers, he says that dried fruits, such as raisins, currants, and peaches, are macerated with water, to which a certain amount of sugar is added. The mixture is then fermented, and when fermentation is considered sufficiently advanced, it is checked by the addition of salicylic acid, sufficient being added to act as a preservative and prevent further fermentation. This liquor is clarified, coloured, and flavoured to cause it to resemble port, claret, or any desired kind of "vintage" the purchaser may desire. It is satisfactory to learn that Dr. Edson obtained an order for the destruction of 5280 gallons of this compound—wine it cannot be called.

Enquirer (Exmouth) will find what he desires in THE LANCET, vol. ii. 1885, p. 881, and vol. i. 1886, p. 609.

CASE OF POISONING BY STRYCHNIA.

To the Editor of THE LANCET.

SIR,—The following notes may be deemed of sufficient interest for publication.

At 8.15 A.M. on Sept. 23rd last, I was summoned to see a woman, who had been moaning and screaming for some time, but was said to have become speechless, unconscious, and seemed very bad. She was a lodger named Margaret B——, aged thirty-five, married but had been deserted by her husband a few days previously. She was lying on her back in bed, dressed, her eyes closed, and could not be roused; her arms were pressed against her sides, and her hands clasped firmly over the chest; the skin was a reddish-purple, and hot; tongue dry, pulse weak (96); respiration short. Every few minutes she would groan, her arms become pressed more firmly against her sides, her legs being rigid and straight, and the soles of the feet arched and back stiff. She could not bend her back, her pulse increased in rapidity, and respiration seemed to stop. There was a peculiar hoarse rattling in the throat, and her face became of a bluish-purple colour. On the mantel-piece I found a teacup empty and dry, lined with a bluish material which tasted bitter, and in the chamber utensil an empty packet of vermin-killer; an attempt to produce emesis failed, and the passage of a tube down her œsophagus brought on a spasm which threatened to end the case; regurgitation in her jugulars was noticed up to the angle of the jaw, and asphyxia almost took place. Chloroform was of certain benefit in two of the spasms, and I procured a one-in-two solution of chloral hydrate and gave her three hypodermic injections of twenty minims each, which reduced the rapidity of the paroxysms and improved her breathing. At 9 o'clock I gave her a final hypodermic injection, making about forty grains in all; she was drowsy, but was made to swallow half an ounce of tannate of glycerine and allowed to sleep. The first needle puncture gave rise to a drop of thick dark venous blood, but the colour rapidly improved. At noon she was still sleeping, but made a slow recovery, and is now in an asylum. I am, Sir, yours truly,

Liverpool, Nov. 9th, 1886. JAS. GRIERSON BROWN, M.B. Lond.

"MORPHIOMANIA."

WITHIN the last few years the disease which goes by the above name has made great strides in France. In the capital its victims almost rival those of alcoholism. At Bellevue a hospital has been opened for the care, and, if possible, the cure of these patients. The cure of it is, however, very rare. It is found that both the use and the deprivation of the drug create a tendency to suicide in the victims; and at Bellevue there are cushioned rooms for some of the patients, and a constant watch kept on all.

B. in the circumstances mentioned, is guilty of no breach of professional etiquette in attending the case.

SANITARY CONDITION OF OXFORD.

To the Editor of THE LANCET.

SIR,—Within the last few days I have been told that the sanitary condition of Oxford in and around the colleges is in a very bad condition, and that more than one case of diphtheria, among the undergraduates, occurred last term. I shall be glad if any brother practitioner can tell me if such is the case, in order that I may give a definite answer to anxious parents. I am, Sir, yours faithfully,

November 25th, 1886. A. T. G. W.

"BARBED WIRE FENCES."

WE have frequently protested against the use of "barbed wire" for fences as being cruel to animals and dangerous to man. It is satisfactory to notice that the Court of Session in Scotland have recently ordered a landowner, who had put up along a public road a wire fence with the top strand barbed, to remove it, as being a danger to the public in the ordinary use of the road.

Dr. R. Rentoul.—The announcement appeared in the 1055th page of our last week's impression.

Francis.—Yes. At the earliest opportunity.

EMIGRATION FOR BELGIAN DOCTORS.

OUR Belgian *confrères* continue to bewail most bitterly the overcrowded state of the profession and the increasing numbers of young men who are yearly entering its portals, only in too many cases to find that it is impossible to secure a sufficient income to live upon. At a recent meeting of the Academy of Medicine a member who had been deputed to report upon a proposed petition to the Government asking for certain concessions for the benefit of rural practitioners—e.g., the formation of provincial medical libraries, the gratuitous distribution of the proceedings of the Academy, the formation of central depôts of surgical instruments, and the assistance of the State in the remuneration of consultants called to patients assisted by the Bureau de Bienfaisance,—after recommending the adoption of this petition, which would somewhat astonish a British Home Secretary, passed on to remark on the overcrowded state of the profession. For this he suggested a remedy, which was no other than emigration to Algeria, a land described by him as a perfect paradise for doctors—at all events, for those who could obtain the post of colonial surgeon, with a salary of 3000 francs, in addition to a house, a garden, and a horse. The only step necessary was to get the Belgian Government to arrange a Franco-medical union with the French Government. If, however, the Algerian medical appointments are as desirable as they appear to M. Barella, it is hardly probable that the members of the profession in France will desire to arrange a union with those in Belgium for the sole purpose of rendering the latter eligible for filling these posts, the number of which is, of course, not unlimited. So our Belgian friends will, it is to be feared, have to look further for a solution of their difficulty.

Mr. F. E. Case.—According to Wooton's "Guide to the Medical Profession," the following reply was given by the Italian Government to a question similar to that put by our correspondent:—By the law Casati all examinations made and degrees obtained outside the kingdom of Italy are valueless, except in special cases. Holders of the M.D. degree of a foreign university of high standing, who can prove having passed the necessary examinations, may, however, be admitted to the general examinations for the grade to which they aspire. Exemption from these examinations in the case of those who have gained special honours abroad can only be obtained through the Superior Council of Public Instruction, in which case the favour will be sanctioned by Royal decree.

M. G. E. (Cardiff).—The case should be brought under the notice of the College from which the advertiser's diploma was derived.

Duped has not enclosed his card.

THE BRITISH EYE HOSPITAL AT JERUSALEM.

To the Editor of THE LANCET.

SIR,—In your issue of Nov. 13th you were good enough to very favourably notice the work carried out under the supervision of the resident medical surgeon, Mr. John Hovell Ogilvie, at the British Ophthalmic Hospital and Hospice of the Order of St. John at Jerusalem. Will you allow me to add that I have to-day received a letter from Sir Edmund and Lady Lechmere, stating that they had just paid a visit to our small hospital, which is situated some little distance outside the city walls, and that they found it in a perfect state of order and discipline, and largely attended by poor suffering patients from all parts of the Holy Land and adjacent countries. You will, I trust, allow me specially to emphasize the fact that no interference whatever is permitted with the religious views of the patients attending, the work being entirely unsectarian, and, except in a very few cases, when grateful patients in a position to pay insist upon making some small offering, the treatment is entirely gratuitous. It may interest your readers to know that the site of the Hospital, at the special request of H.R.H. the Prince of Wales, who is the patron, was generously given by His Imperial Majesty the Sultan.

I am, Sir, your obedient servant,

JOHN H. EASTERBROOK, Hon. Secretary.

Wilkinson-street, S.W., Nov. 16th, 1886.

M. PASTEUR'S METHOD.

Dr. Henry Downes.—We have carefully perused our correspondent's pamphlet, and cannot concur with him in denouncing M. Pasteur's method. We advocate the expectant treatment of this great question. The results of the investigation by the English Commission are being looked forward to with considerable expectation. We may say generally that the results so far obtained by the Commission are not opposed to M. Pasteur's doctrines.

Beaumont Subscriber.—1. Yes.—2. For an answer to this question we must refer our correspondent to our advertising columns.

Dr. J. N. Constable.—The Apothecaries' Society has power to prosecute in such a case.

THE QUEEN'S JUBILEE.

Mr. J. T. Macnamara adds the following suggestion to those made by a correspondent in our last week's issue—viz., that Her Majesty should, in honour of the event, create some few leading members of the profession peers of the realm. By the adoption of this suggestion the profession would at last, even if somewhat tardily, secure from the head of the State that recognition which is eminently its due.

Mr. W. T. Mynors.—The New Act does not alter the law in reference to unqualified assistants.

L.K.Q.C.P.I.—The question is a purely legal one.

CONSULTANTS AND GENERAL PRACTITIONERS.

To the Editor of THE LANCET.

SIR,—As a general practitioner I can quite understand "Fairplay's" feelings by the treatment he received at the hands of the consultant to whom he introduced his patient. Something very similar occurred to me a short time ago. I sent a patient, who was suffering from deafness of long-standing, to consult an aural surgeon, to whom I had previously written detailing the case and asking his opinion, at the same time telling him the treatment I had adopted. In due course I received a letter from him, which was in every way apparently satisfactory. He said, "Your prognosis is, I am afraid, about right. I have ordered the chloride of ammonia inhaler to be used again, and also Politzer's bag." Now, I had used this bag regularly for some time, and went as usual to use it again, when, to my utter astonishment, I was informed that the surgeon had written for an inflater for the patient to use herself (a Politzer's bag). Of course, there was nothing left for me to do; it was no use my arguing the point, for the "doctor had ordered it," and I should have been looked upon as only being pecuniarily interested. I maintain that even an apparently simple operation of this kind cannot be satisfactorily carried out by the patient or another unskilled person, and therefore the patient does not derive the benefit intended. I have received very many kindnesses from consultants, and without my seeking them, so that we must not place them all in the same category. I have had on several occasions patients consult physicians, &c., without my knowledge, and without the intention of being in any way discourteous, and the first intimation of such a consultation has been a letter from the consultant. If all consultants would act in the same way towards the general practitioner, it would be much better for the former, and much ill-feeling would be spared the latter.

I am, Sir, your obedient servant,

Dec. 1st, 1886. M.R.C.S.B.

TO YOUNG MOTHERS.

L. P.—The practice of young mothers studying books on first pregnancies is of very doubtful advantage. It will be much more profitable to them to ask their ordinary medical adviser for a little general advice on the subject, to observe the ordinary rules of good health, and otherwise to ignore the subject.

A.M.D.—Our attention has been called to the promotion in question; but we must defer any remarks upon it till next week.

Dr. J. M. Hope (West Australia).—We have had the seeds examined at Kew Gardens. They are certainly those of Abrus precatorius.

A. B. C.—We do not prescribe.

ERRATA.—In the ninth line of the second paragraph of the letter in our last issue, signed "Ye Humble Apothecarie," for "is" read *are*; and in the fifteenth line of the same paragraph for "physician" read *physicians*.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Quinlan, Dublin; Mr. Holmes, London; Dr. Schiltz, Cologne; Dr. Mackenzie Booth; Lord Stanley of Alderley; Mr. Mayo Robson, Leeds; Mr. T. F. Chavasse, Birmingham; Mr. Cresswell Hewett, London; Mr. Grant; Dr. Archie Stockwell, Fort Huron; Mr. J. Phillips; Dr. McMunn, Seafield; Dr. Downes, Tiverton; Mr. M. G. Evans, Cardiff; Mr. T. Shepheard, Chester; Mr. G. A. Carpenter, London; Mr. H. F. Bailey, Lee; Mr. Phillips, Birmingham; Mr. Lomas, Vaud; Mr. Bates, New York; Dr. McCambridge, Illinois, U.S.A.; Messrs. Armbrecht and Co., London; Mr. J. T. Macnamara, London; Messrs. Isaacs and Co., London; Mr. Kingsbury, Vermont, U.S.A.; Dr. Stockwell, New York; Mr. Godfrey, Northampton; Dr. J. Mickle, London; Mr. E. Davies, Llandudno; Mr. R. W. Parker, London; Dr. Illingworth, Clayton; Mr. J. Lee, Nottingham; Dr. Lloyd, London; Dr. Fenton, London; Dr. Kirk, Partick; Mr. Saunders, Manchester; Mr. Nelson Hardy; Mr. J. Miller, London; Mr. S. Snell, Sheffield; Dr. Cripps, London; Dr. Hall, Tuebrook; Dr. Wylie, Madras; Messrs. Robinson and Scott, Edinburgh; Mr. Evans, Oswestry; Messrs. Macmillan and Co., London; Mr. Moore, Stourbridge; Mr. Martindale, London; Mr. Borwater, London; Mr. Williams, Shrewsbury; Messrs. Hall and English, Birmingham; Dr. Lesson, Brighton; Messrs. Hopkinson and Co., Nottingham; Mrs. Hitch, St. Leonards; Messrs. Street and Co., London; Mr. Gardner, Ashton-under-Lyne; Messrs. Cane and Co., Southsea; Dr. Stuart, Glasgow; Mr. Cook, London; Messrs. Lee and Martin, Birmingham; Dr. J. Lucas, London; Dr. Barr, Glasgow; Dr. Gunn, Invergordon; Dr. Love, Mitcham; Messrs. Burroughs and Wellcome, London; Mr. Hardman, Birmingham; Messrs. Griffin and Co., London; Mr. Wilcox, Woolwich; Messrs. Douglas Fraser and Sons, Arbroath; Dr. Macgregor, Aberdeen; Dr. Wall; Dr. Hunter Mackenzie, Edinburgh; Dr. Banning, London; Messrs. Bennett Bros., Salisbury; Mr. Gurner, London; 420; M.R.C.S.E.; W., London; A. T. G. W.; Alpha; M. O. H.; An Old-standing L.K.Q.C.P.I.; An Anxious Father; L.R.C.P.; Vincit qui Patitur; B. H.; Beaumont Subscriber; J. H., Scarboro'; Medicus; M.D.; M.Ch.; Matron! Canterbury; M.R.C.S.; W. H. J.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Harley, London; Mrs. Wilkins, Salisbury; Mr. Brown, Bristol; Mr. Mackay, Edinburgh; Mr. Kerr, Glasgow; Mr. Waddy, Wexford; Mr. Hunt, Manchester; Messrs. Cornish, Manchester; Miss Pudney, Earl's Colne; Mr. Jones, Loughor; Mr. Hawkins, London; Messrs. Hunter and Co., Aberdeen; Mr. Cornish, Birmingham; Mr. Blenkarne, Leicester; Mr. Sergeant, London; Mr. Lambart; Messrs. Swan and Co., London; Mr. Dowding, Bournemouth; Dr. Griffith, Milford Haven; Mr. Beach, London; Mr. Ward, London; Messrs. Hall and Palmer, Manchester; Mr. Leggat, Woodgreen; Messrs. Zimmermann and Co.; Mr. Hackett, Manchester; Dr. Doyle, Dublin; Mr. Maw, Sheffield; Mrs. Townson, Chester; Mr. Cole, Exeter; Mr. Blatchley, London; Messrs. Essinger, London; Dr. Sinclair, Dundee; Mr. Baron, Manchester; Dr. Meadows, Leicester; Mr. Arnold; Messrs. Read and Co., Bristol; Mr. Whiteside, Shap; Mr. Heard, Dublin; Mr. Twyford, Hanley; Mr. Cox, Walworth; Dr., Bayswater; E. J. P., Hayes; M.D.; A. C., Tredegar; Hugo; Confident; Zoophyte; Surgeon, Balham; Agricola; Tunbridgens; Energy; Iodine; M.B., Nottingham; S. A. A., Rochester; T. L.; St. Vincent; C. C. T.; Vigilans, Shap; M.D.; M. R. D.; Scalpel, Shepherd's Bush.

Essex Telegraph, Birmingham and Aston Chronicle, Sunderland Herald, New Zealand Times, South Wales Daily News, Hastings and St. Leonards Observer, &c., have been received.

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